

IMPLICIT GOAL PROCESSES IN MESSAGE EVALUATION AND SELECTION

A Dissertation

Presented to the Faculty of the Graduate School

of Cornell University

In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

by

Norman Adrian Porticella

August 2011

© 2011 Norman Adrian Porticella

IMPLICIT GOAL PROCESSES IN MESSAGE EVALUATION AND SELECTION

Norman Adrian Porticella, Ph. D.

Cornell University 2011

This research represents an attempt to apply a functional understanding of human perception, evaluation, and behavior to the study of mediated narratives. By bringing together recent advances in the understanding of motivational processes from the field of social psychology and the traditional approach with which communication scholars have addressed the influence of active goals on media evaluation and selective exposure, I hope to establish a foundation upon which to advance communication research in this area. After reviewing relevant literature on implicit goal processes and the uses and gratifications and mood management paradigms (Chapter 1), I report on the results of an attempt to develop a suitable method for measuring implicit responses to the more complex message stimuli that are our stock in trade as communication researchers (Chapter 2). Finally, I report the results of a study which manipulated goal activation and measured evaluations and selections of goal-relevant entertainment options (Chapter 3) and conclude with a discussion of worthwhile directions in which to further advance this line of research (Chapter 4).

BIOGRAPHICAL SKETCH

Norman Porticella earned a Bachelors of Arts degree as a double major in film studies and sociology at the University of California, Santa Barbara. After two years of work in film production and five years in support of communication research at Stanford University, he returned to school for a Master of Science and a Ph.D. in communication at Cornell University.

to mom and dad

ACKNOWLEDGMENTS

I would like to thank the Department of Communication for supporting me throughout the entirety of my stay as a Master and then Ph.D. student. In particular, I would like to thank Melissa Ferguson whose research formed the foundation I tried to build upon in my work, whose conversations never failed to enlighten, and whose lab meetings continue to inspire, Sahara Byrne and Jeff Hancock for their useful feedback throughout my dissertation work, and of course Mike Shapiro for his support and his ability to still wonder and explore. Finally, I cannot thank enough my family and friends old and new who kept me going through it all. Thank you.

TABLE OF CONTENTS

Biographical Sketch	iii
Dedication	iv
Acknowledgments	v
List of Figures	vii
List of Tables	viii
Introduction	1
Literature Review	2
Study 1: The Marker System: A Procedure for Using Implicit Measures with Mediated Messages	22
Study 2: The Influence of Implicitly Activated Goals on Evaluations and Selection of Entertainment Messages	40
General Discussion	61
Appendices	67
References	73

LIST OF FIGURES

Figure 1.

A Model of Functional Message Evaluation and Selection. 7

Figure 2.

Example of a single LDT trial with a critical prime (*PRINT*) and affiliation target (*friend*). 29

Figure 3.

Overview of the test of the Marker Procedure. 30

Figure 4.

Response latencies (in milliseconds) for affiliative targets as a function of priming with standard error bars. 36

Figure 5.

Standardized evaluation scores for competitive synopses by standardized EV scores and priming conditions within each timing condition. 51

Figure 6.

Desire to watch a competitive movie clip by standardized competition EV scores and priming conditions within each timing condition. 53

LIST OF TABLES

Table 1.

*Mean Response Facilitation for Affiliative Targets Across LDT Sessions
(in Milliseconds) by Priming, Synopsis Version, and Marker* 37

Table 2.

*Percentages of participants choosing affiliative and competitive synopses by
competition EV for each priming condition within the immediate timing condition* 55

Table 3.

*Percentages of participants choosing affiliative or competitive synopses by
competition EV for each priming condition within the delay timing condition* 55

CHAPTER 1

Introduction

Why are you reading this? Chances are you are reading this because some part of you told you it might be important to you in some way (or perhaps important to someone who is important to you). At the same time, another part of you told you that you had the capacity (e.g. time, reading skills, relevant knowledge base) to read this. These two factors (importance and subjective expectancy of success) are the strongest predictors of goal pursuit. You are at this moment pursuing at least one goal (to read these words), but probably several others too. While I would like for you to have a good laugh and would prefer if you did not cry during the course of reading the rest of this paper, it is likely that you have had these reactions in the past when, instead of selecting an academic paper to read, you chose some form of entertainment media. Though you knew going into it that someone or some group of people had written the script, that a number of people worked diligently to position lights and frame the image through a camera lens, and that the actors you see on the screen do not live that way off-screen, you still engaged with what you were seeing as if it was real. As I will argue throughout this paper, the same motivational processes that drove you out of bed this morning and at some point drove you to get this far into this paper are also at work when you choose amongst the vast sea of entertainment options available to you. The idea that our active goals influence not only our entertainment choices, but how we engage with narratives and how those narratives influence us is, I argue, the most compelling explanation for why we choose the stories we choose, why we laugh and cry with them, and why and how they change us. This is, admittedly, not a new idea. The uses and gratifications perspective on message selection, processing, and influence, along with ongoing work by mood management researchers, has been working under this notion for upwards of 60

years. What I offer in this paper is a nuanced perspective that builds on these approaches by integrating recent developments in research on goal processes. After reviewing relevant literature on implicit goal processes and the uses and gratifications and mood management paradigms (Chapter 1), I report on the results of an attempt to develop a suitable method for measuring implicit responses to the more complex message stimuli that are our stock in trade as communication researchers (Chapter 2). Finally, I report the results of a study which manipulated goal activation and measured evaluations and selections of goal-relevant entertainment options (Chapter 3) and conclude with a discussion of worthwhile directions in which to further advance this line of research (Chapter 4).

Literature Review

This review provides an examination of current approaches to selective exposure research through the lens of contemporary understandings of implicit human motivation. After reviewing current research on implicit goal processes and outlining a model of functional media evaluation and selection, I discuss two prominent approaches to selective exposure, uses and gratifications and its offshoot mood management, with a focus on how motivation is conceptualized in each as well as proposals for extensions to each approach drawing primarily on contemporary findings regarding implicit goal processes.

Implicit Goal Processes

Goals are currently defined as desirable states which, when active (i.e. as long as they have not been attained), influence perceptual, evaluative (or attitudinal), affective, and behavioral processes in ways that facilitate their attainment (e.g. Fishbach & Ferguson, 2007). Implicit goals are those which function and influence perception, evaluation, affect, and behavior without the individual's awareness of their influence or even presence. As such, and contrary to prior

conceptualizations of goals which posit a conscious initiation of goal pursuit as a requirement, they are capable of being activated and of operating without and often despite the individual's conscious intention and control.

Goals are believed to be represented cognitively and can function nonconsciously in accordance with the classical associative network model of memory (Anderson & Bower, 1973; Collins & Loftus, 1975; Higgins, 1996; Neely, 1977; Posner & Snyder, 1975; Shiffrin & Schneider, 1977). According to goal systems theory (Kruglanski et al., 2002), goals are represented and organized in memory in associative networks built upon the frequent co-activation of desired states, relevant evaluations, affect, behaviors, and situational goal opportunities driven by a process of accessibility, associational strength, and spreading activation.

Goal systems theory also conceptualizes goals as *hierarchically organized* from superordinate abstract goals (e.g. relatedness, competence, autonomy; Krapp, 2005) to subordinate goals or means that ultimately motivate the movement of particular muscles. The activation of implicit goal processes can occur via contextual priming in response to environmental or cognitively associated stimuli or it can be well-learned (i.e. chronic) and, given a situational opportunity for its pursuit, no longer dependent on environmental or associational stimulation (i.e. always on).

In line with expectancy-value models of motivation (e.g. Lewin, Dembo, Festinger, & Sears, 1944; Tolman, 1955; Vroom, 1964), the effects of goal activation on downstream processes are moderated by the product of the expectancy (the subjective likelihood) and value of achieving the goal. Finally, in contrast to semantically activated or primed constructs whose activation and influence diminish rapidly, goal activation and its influence on cognitive, affective, and

behavioral processes have been shown to persist or increase over time and across interruptions until the goal has been completed (e.g. Aarts, Gollwitzer, & Hassin, 2004; Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trotschel, 2001; Chartrand, Huber, Shiv, & Tanner, 2008; Ferguson & Bargh, 2004).

Attention. Active goals have been found to have powerful effects on attention which is a necessary precursor for evaluation and selection behavior. Using a dichotomous listening task wherein participants heard slightly different audio passages in each ear, Klinger (1996) found that participants spent more time listening to and remembered more of the goal-relevant passage (modified to include goal-relevant words) than the control passage. Similarly, Riemann & McNally (1995) found that participant responses on a Stroop task were affected by their active concerns. Asked to name the colors of words, participants were slower in doing so when the words were related to the active concerns. This slower response is understood to be the result of more cognitive resources being allocated to processing the meaning of the word rather than its color. More recently, Moskowitz (2002) induced a state of goal incompleteness in athletes by having them think about a recent game they had lost. These athletes showed automatic attention for success related words on a Stroop task. Moskowitz explains this effect as the result of automatic attention being allocated to environmental stimuli associated with attainment of an active goal. Such effects on attention have also been witnessed using psychophysiological methods. Nikula, Klinger, and Larson-Gutman (1993), for instance, found that participants exhibited stronger orienting responses when exposed to goal-relevant three-word clusters than when they were exposed to control word clusters.

Evaluation. Individuals who have been implicitly primed with a goal or for whom a particular goal is chronic are not just more perceptually ready to identify and process

environmental stimuli in a goal-relevant manner. They are evaluatively ready as well. Once a goal is activated, individuals are more likely to evaluate environmental information in a goal-relevant manner. Research over the last decade has demonstrated that active goals direct evaluative processes such that positive evaluations are automatically activated upon perception of stimuli representing goal affordances or means (Ferguson & Bargh, 2004) or goal attainment or end-states (Ferguson, 2007). Furthermore, Ferguson (2008) found that these implicit evaluations moderate goal-driven behavior. Implicit evaluations are here defined, like implicit goals, as evaluations which can be activated and which can operate (and be measured) outside of conscious awareness, intention, and control. Ferguson and Bargh (2004) posit this evaluative process as functional in that the relative increase in positivity renders goal affordances more approach friendly, thus facilitating goal-consistent behavior. Several important mediators and/or moderators for this process have also been identified. Ferguson and Bargh (2004) found that implicit evaluations of goal means occur only while the goal is active. Once a goal has been attained, the implicit evaluative system simply moves on to facilitate other active goals. Implicit evaluations are also restricted to means which are highly relevant to the active goal and only when that goal is important to the individual. Subsequent studies have also demonstrated that evaluative readiness is stronger among individuals who have some skill with the goal. Students with greater skill at academic achievement (based on self-reported ease of pursuit and GPA) have exhibited faster evaluative responses toward goal means (e.g. “library”) and end-states (e.g. “achievement”) (Ferguson, 2008).

Behavioral Pursuit. The functional nature of implicit goal activation and its downstream effects on attention, information processing, and evaluation is demonstrated most effectively by observations of its facilitative effects on subsequent behavior. It is now well established that

actual goal pursuit (i.e. behavior) can be activated and carried out implicitly as well. Individuals implicitly primed with goals actually choose apples over chocolate bars (Fishbach, Friedman, & Kruglanski, 2003), they eat fewer cookies (Ferguson, 2007), they become more helpful (Macrae & Johnston, 1998), they walk more slowly (presumably to facilitate interaction with an elderly person, Cesario, Plaks, & Higgins, 2006), they become more understanding, and they achieve more regardless of whether or not they have consciously perceived the priming stimuli (Fitzsimons & Bargh, 2003). In general, individuals approach goal-facilitative things and avoid goal hindering things even when they don't know it and especially when they are skilled at pursuing the goal in question (Fishbach & Shah, 2006).

Application to Mediated Messages

A model of functional message evaluation and selection. The purpose of the current research program was to connect the above understandings with research on mediated messages to investigate how active goals and associated perceptual, evaluative, and behavioral processes might function in a mediated communication context. Using entertainment media as one example of the many areas of communication research this discussion might inform, I investigated how accounting for goals and related processes can inform understandings of what draws us to different types of characters and narratives. Are we really just trying to be entertained or are we actively, though nonconsciously, working through important aspects of our lives, namely the goals we have for ourselves? The research reviewed above suggests the following model of functional media evaluation and selection.

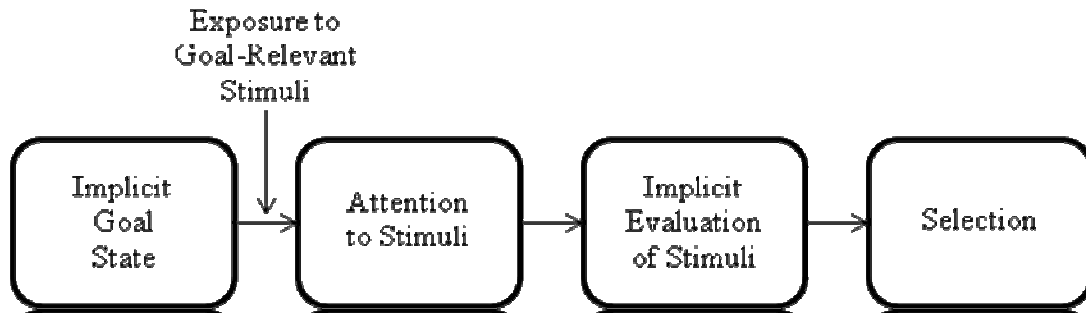


Figure 1. A Model of Functional Message Evaluation and Selection

Why an Implicit Approach?

What advantages does an implicit approach offer for the analysis of messages? One of the interesting things about studying media viewership and particularly entertainment media viewership is that audiences do not equate the activity with goal pursuit beyond wanting to be entertained or enriched in some way. Thus, audiences are unlikely to be completely aware of the reasons they are drawn to and like particular types of messages or the narratives, situations, characters, actors, etc. that they depict. Explicit measures and manipulations give us only part of the picture and one biased by the participants' own theories for their behavior, social norms, demand characteristics, and self-presentational processes. This is particularly true for goals and evaluations that are socially censured. Implicit manipulations and measures of goal processes explain a unique proportion of the variance in this research. In the study of mediated messages, it would be an underexamined proportion.

Current Perspectives on Selective Exposure

Uses and Gratifications. Studies of media evaluation and selection have tended to focus on controllable responses involving relatively conscious processes. The most prevalent perspective applied in investigations within this context has been the model underlying uses and gratifications (U&G) research. U&G researchers (e.g. Katz, Blumler, & Gurevitch, 1974, Rubin,

2009) posit that social and environmental situations shape psychological needs which activate motivations to satisfy those needs through interaction with one's environment, including media and its mediated environments. Audiences, driven by specific motives, actively shape media use such that different motives will result in different patterns of selective exposure. This motivated media use shapes media effects, including effects on subsequent media use. Specifically, among other effects, consumers learn what gratifications they receive from particular channels (e.g. television vs. newspaper), content types (e.g. reality shows vs. soap operas), and more specific content within a type (e.g. male characters vs. female characters) and then use media in accordance with their needs at the time. In sum, the U&G model asserts that different situations will activate different needs resulting in differing media use to differing effects.

According to Katz and associates (1974), the uses and gratifications "approach" grew out of a recognition of audience activity in media selection in contrast to the direct effects model that held the reins at the time. Starting out with a bifurcated conception of uses (diversion and utility) they conceived of diversion as a virtually mindless selection of, primarily, "entertainment" channels and content types. As such, they focused on the utilitarian side leaving the "diversionary" level virtually untouched. Despite the addition of numerous motives to the U&G repertoire, the bifurcated notion which pits "utilitarian", "instrumental", or "cognitive" uses against "diversionary", "mindless", "ritualized", or "affective" ones (McGuire, 1974; McQuail, 1984; Perse, 1990; Rubin, 1984) has persisted into recent studies and overviews (e.g. Rubin, 2009).

The U&G paradigm has spent the majority of its long tradition focused on identifying different conscious motives and correlating them with the use of different media channels and content types (Rubin, 2009) as well as, more recently, with other non-motivational processes and

constructs such as news processing and knowledge gain (Eveland, 2001; Eveland, Shah, & Kwak, 2003). This focus on *which* goals are at work has come at the price of developing a general understanding of *how* goals work in the media selection process. Self-report of motivations, its dominant operationalization, leaves the more automatic workings of motivation in the heads of its respondents. Several researchers have bemoaned the prevalence of self report measures of motivations for selective exposure. Vorderer, Steen, and Chan (2006), for instance, accuse the paradigm of assuming respondents are fully aware of their motives and of treating self report as if it were a valid and sufficient measure of active motivation. That said, calls for a more micro-oriented (though not necessarily automatic) approach to U&G research can be found (e.g. Zillman & Bryant, 1985a) along with a sprinkling of answers to that call over the last 30 years.

Motivational extensions. Rubin (1984) reports 70% of respondents said they watch television to learn about other people and events. Most people would judge this learning goal to be a worthwhile pursuit. However, cognitive dissonance (Festinger & Carlsmith, 1959) and self-perception theory (Fazio, Zanna, & Cooper, 1977) predict socially desirable responding when television behavior is brought to the respondent's attention. Regardless of the likelihood that those 70% actually made a conscious decision to view television for learning purposes, it might actually be the case at the implicit level of media evaluation and selection. Given the limitations of self report measures described earlier, a logical direction for future research is to begin applying implicit manipulations and measures of motivation and evaluation. U&G research conceptualizes audience activity as a continuum between passive and active (Rubin, 1993). What remains is to better understand how motivation works among what are considered "passive" users. In fact, there appears to be a tension within the U&G literature concerning the

nature of motivation in relation to automatic cognitive processes. One finds author(s) acknowledging the potential influence on selective exposure of processes that are either unintentional or of which the individual is unaware. However, despite this acknowledgment, the author(s) then turn to definitions of key constructs which exclude such processes. Zillmann and Bryant (1985a), for instance, mention the demands of our limited processing capacity as requiring automatic selectivity that facilitates what most would agree is our most basic goal – survival. After briefly touching on orienting responses that prepare us for a fight or flight response, they proceed to define selective exposure as “*behavior that is deliberately performed to attain and sustain perceptual control of particular stimulus events*” (emphasis in original, p. 2). A short while later, they acknowledge that program selection may at times be “spontaneous and somewhat mindless, even mechanically determined” but then go on to suggest one way of determining what has been selected is by “determining *whether or not exposure to the program or the segment was intended and/or was the primary perceptual activity during the time course of the program or segment*...granted distractions and social influences on the choice” (emphasis in original, p. 5).

To some extent, this self-imposed boundary of conscious deliberation and intention is quite reasonable given the fact that research on non-conscious motivational processes has only come to fruition over the past 20 years and much of the core literature within the U&G paradigm was published before then. However, even the most recent reviews of the paradigm demonstrate a lack of integration of these developments. Rubin (2009) quotes one of his previous works (Rubin, 1993) which conceptualizes audience activity as “a continuum between being passive (and expected to be directly influenced by messages) and being active (and expected to make rational decisions about accepting or rejecting messages)” (p. 172). We might consider changing

this continuum to one anchored by controlled and automatic, conscious and nonconscious, or explicit and implicit. Such a change could prove fruitful because it seems more and more that, whether we know it or not, whether we want it or not, we are rarely if ever inactive or passive. We are goal-driven systems, the workings of which we are only partially aware. Once this is acknowledged, the notion of passive reception becomes untenable. As another example of the limited nature of the goal concept in U&G research, Rubin (2009) equates a relatively passive audience with less goal-directedness and a “ritualized” or “diversionary” viewership. In contrast, he conceptualizes an “instrumental” or “utilitarian” viewership as being characterized by intention, selectivity, involvement, and concerns of utility. Rubin’s conceptualization of goal-directedness, however, is limited to the viewer’s conscious intention to watch a particular program – a conceptualization shared by other U&G researchers (e.g. Levy and Windahl, 1984). Curiously, Rubin’s list of characteristics of an instrumental viewership line up rather well with Bargh’s “four horsemen” of automatic processes (Bargh, 1994). Bargh lays out a similar set of characteristics that define cognitive, affective, and behavioral processes as more or less automatic. A process (including motivational processes) is thought to be automatic to the extent that it can be characterized as occurring without requiring the actor’s intention, control, cognitive resources, or awareness (Bargh, 1994; Bargh & Gollwitzer, 1994; Bargh et al., 2001). Further examination is needed to ascertain the extent to which the active/passive continuum can be mapped onto the controlled/automatic continuum. Though Rubin seems to have come to this conceptualization by other means, he has nonetheless come to it. At issue here is that he uses it to maintain the normative, socially constructed boundary between a self-affirming functional viewership and an allegedly nonfunctional or even dysfunctional one. One must remember that the U&G paradigm developed during an era of communication research that hoped to salvage the

notion of human agency from earlier direct effects conceptualizations concerned with the influence of war time propaganda.

Mood Management. The mood management branch of the U&G paradigm has held that consumers use media in accordance with hedonic motives to increase positive affect (e.g. by seeking out media content that corroborates their current positive dispositions) or decrease negative affect (e.g. by avoiding content that is semantically associated with the cause of that state) (e.g. Zillmann & Bryant, 1985b). However, recent mood management researchers (e.g. Oliver, 2008; Oliver & Raney, 2008) have begun to address entertainment choices that conflict with this basic premise - namely the choice of negatively valenced content such as drama and horror. Among recent advances within the mood management perspective are developments in understandings regarding the interrelation between motivation and discrete emotions.

Appraisal theory (e.g., Frijda & Zeelenberg, 2001; Lazarus, 1991; Scherer, 1984, 2001) provides a compelling working model of emotion within entertainment research (e.g. Hoffner, 1997; Konijn & Hoorn, 2005). Bartsch, Vorderer, Mangold, and Viehoff (2008) offer a recent and highly succinct account of its basic premises. According to appraisal theory, emotions are elicited by appraisals of objects and events in relation to one's personal disposition, which includes one's current goal states and situational context. Given an active goal and a goal-relevant context, stimuli that signal motivational affordances or hindrances are more likely to elicit emotional responses than if the individual does not have that particular motive or if the situation is irrelevant to it. Proponents of appraisal theory hold that negative emotions arising from negative situational appraisals will energize subsequent motives and behavioral tendencies to cope with the threatening situation, perhaps by changing the situation, one's own behavior, or even one's attitude toward the specific goal within the situation. Simply put, active needs give

rise to goals to satiate them. Active goals influence how we appraise or evaluate our current state along with environmental stimuli. Namely, we evaluate our current state of goal progress (i.e. the extent to which we are progressing or not toward need satiation) and environmental stimuli in terms of whether or not they are relevant to these active goals and whether they will facilitate or hinder these goals. This evaluative process then gives rise to general affective and more discreet emotional responses which serve as indicators to us of whether or not we need to take action and what action we should take (e.g. approach or avoid) relative to current environmental stimuli. We tend to approach stimuli which have been evaluated positively relative to our goals (i.e. facilitators) and tend to avoid stimuli which have been evaluated negatively relative to our goals (i.e. hindrances or threats). All of this may occur with or without our awareness of it.

In order to better situate the mood management perspective within the appraisal model of emotions and perhaps account for the aforementioned discrepant media selections currently inspiring new approaches to mood management investigations, Bartsch and associates (2008) forward the idea of meta-emotions. Bartsch and associates argue that emotions can be conceptualized in the same manner as other targets of goal-relevant appraisals such that they may be appraised and that this appraisal may give rise to meta-emotional responses to the emotions. These meta-emotions may then motivate and inform subsequent media selections such that, while the selections may not fit the hedonic model in terms of the valence of the active primary emotions, they may fit in terms of the valence of the meta-emotions which are active. Parallel to the ideas posited by Bartsch and associates, Oliver (2008) has responded to the discrepant selections by forwarding a notion of a eudaimonic motive that may be active instead of a hedonic one. Rather than a simple hedonic motive aimed at maximizing pleasure, a eudaimonic motive

has as its desired endstate “greater insight, self reflection, or contemplations of poignancy or meaningfulness (e.g., what makes life valuable)” (p. 40) and can be regarded as attempts to realize the full potential of what it is to be human. Put more simply, it is concerned with self-actualization and, to the extent that self-actualization is facilitated, positive affect is expected to ensue. While the addition of meta-emotions and eudaimonic motives are positive steps toward a better understanding of media selection processes, they seem to steer clear of a large body of relevant knowledge on the interrelations of emotion and motivation which address how these processes function and how they influence what we pay attention to and how we evaluate it.

A third approach to expanding mood management’s predictions in order to account for apparently non-hedonic selections comes from Tan (2008) who offers up *interest* as an emotion capable of better explaining the selection process. What Tan ends up doing, however, is laying the foundation for a broader understanding of emotion processes which account not only for media selection, but also post-selection engagement with entertainment media. Summarizing the work of Steen and Owens (2001) and Tooby and Cosmides (2001), Tan (2008) provides a functional perspective on entertainment which posits that, “when there is no pressure to work on fulfilling primary needs, humans tend to engage in organizing activity, experimenting with situations that are too rare or risky in real life to afford try-out and deliberation” (p. 30). Tooby and Cosmides (2001) argue that natural selection has endowed us with a feeling of gratification from engaging in play. Similarly, Steen and Owens (2001) argue that humans are designed to avoid boredom and are equipped with a predisposition for exploration, challenge, and play. This makes engaging in entertainment activities intrinsically rewarding. In short, we seek entertainment because it feels rewarding. Regardless of our conscious intent, it is also adaptively functional.

Tan posits interest as an emotion arising from the state of a particular set of needs, namely needs for stimulation and learning new things, the antithesis of which is boredom. However, positing a need for stimulation and learning new things as the factors underlying an emotion elides the fact that it is the state of any of our needs and related goals that may be evoking such an emotional response. Needs for stimulation and learning new things are at best mere examples of a broader set of needs. They may also be needs or motives that are subordinate to other more basic ones. It may be the state of needs and related goals which underlie these needs that focus motivational, evaluative, and attentive processes on environmental stimuli that are deemed relevant. While we do seem to be drawn to stimulating stimuli (novel or not), it is not just any old stimuli that stimulates us. It is typically stimuli that are relevant to, or at least hold the potential of being relevant to, other more basic needs. From this discussion, it seems reasonable to conclude that emotions not only follow goal states but may initiate (e.g. boredom triggers exploration) and sustain (e.g. via interest from need/goal relevance) motivation to engage in communicative (in this case entertainment) activity for adaptive purposes (e.g. skill development) of which the actor may be unaware.

Motivational extensions. There are great opportunities here to advance theoretical understandings of how emotion may impact the evaluation and selection of entertainment media. In order to further develop these understandings researchers might pursue more discreet investigations of both the controlled and automatic processes underlying evaluation and selection. Given the importance of motivation to understandings of emotion in this context, it seems very reasonable to suggest a focus on providing concrete measurements and manipulations of need and goal states. Given the vast unexplored area of human needs, the goals they elicit, and the emotional responses to the states of these needs and goals, research should begin to go

beyond the more superficial or subordinate goals they have used as their starting point. To the extent that we accept the claim that humans are functional beings, we should look beyond processes like mood management which on their own say little about how humans manage their world to meet their basic needs. While advances are being made beyond the initial hedonic premise, there is still an assumption that people manage their moods irrespective of the causes of those moods. If emotions are indicators to us of the state of our needs in relation to our immediate context, then we should get on with understanding what those needs are, which goals are activated to serve them, how the interaction of needs, goals, and context manifests itself in affect and emotion, and how this entire system comes together to influence media evaluation and selection as well as media processing, engagement, and its influence on individuals and society as a whole.

Initially, mood management research might better explain and predict media evaluation and selection by incorporating underlying goal states into their model. Participants presented with equally valenced media options should be more likely to evaluate more positively and select the option that is relevant not only to their superficial mood management goals but to the goal states that underlie their current moods and emotions. Nabi, Finnerty, Domschke, and Hull (2006) provide a useful example to consider here. The focus of their study was on the relationship between the feeling of regret and media evaluation and selection. Participants were first shown a brief portion of a reality television episode in which it is revealed that a character has cheated on her boyfriend. At this point, the participants are asked if they want to watch more of the episode. Participants who had themselves cheated on their relationship partners and felt regret about it were the most likely to want to watch more. This suggests support for experience-relevant selection processes when there is something about the experience that is still active as indicated

by feeling regret. If we apply the functional account of emotion, we might infer that some goal was active for the participants who were feeling regret compared to those who were not feeling regret. Participants were then shown additional footage where the character either expressed regret or rationalized her behavior. The authors found that participants who had both cheated on their relationship partners and felt regret about their behavior were more likely than others to enjoy viewing the version in which the main character rationalized, rather than expressed regret for, her behavior. While these results provide evidence of a positive relationship between feeling regret for one's behavior and preferring media that includes a rationalization of that behavior, consideration of the potential goal states of these participants provides several alternative explanations for the results.

First, it seems safe to assume that people enter and maintain relationships with other people out of a basic need for relatedness. We might draw on an evolutionary paradigm to point out the benefits for survival of not being alone in the world though this is not necessary here as everyone learns very early on that one's wellbeing and success in life strongly depends on their ability to get along with others. It is also safe to assume here that the regret these participants were feeling was the consequence of perceiving themselves to be in a state of goal threat (if the relationship was still on) or failure (if they had broken up with their partner). In cheating on their significant other, they had threatened the future of an important relationship. It is possible that the rationalizing depiction was selected more often because it may have been interpreted as a depiction of someone who had mastered the situation and who was by example presenting information on how someone in a similar situation (i.e. the participant) could manage their goal pursuit. In other words, the rationalizing version may have been evaluated as a facilitator of a goal (e.g. maintaining the relationship or moving on) that was under duress or in a state of

incompleteness (e.g. Moskowitz, 2002). The idea that individuals prefer to watch characters that are similar to their ideal self (i.e. representatives of successful goal pursuit) over characters that are similar to their actual self has already found support in recent research (Shapiro, Porticella, & Hancock, 2008).

Second, regardless of whether the active need at the time of selection had to do with affiliation, the description which mentioned rationalization may have primed alternative goals – perhaps the same ones that led to the infidelity in the first place and which were not only evaluated positively at the time but also successfully acted upon. Activating a competing goal which one feels more capable of achieving could increase interest in media that may be more relevant to and facilitative of this goal than to media which provides nothing but a confirmation of goal failure. By considering the stimulus materials used in the study it becomes apparent that the regretful version focused on the potential loss of the relationship (“her boyfriend indicates that if she cheated, he will break up with her”) while the rationalizing version focused on a self-actualizing goal (“she indicates that it is unfair of her boyfriend to limit her behavior”). While additional possibilities could be considered, it is reasonable to expect that incorporating the needs and goals that underlie emotions would prove fruitful here.

Communication research has begun its investigation of motives at the conscious surface of media behavior (e.g. motivation to rationalize/justify oneself, to process information, to learn about the world, to relax, etc.). My argument is that, given the advances in research on motivation, it is now not only possible but worthwhile to better investigate what lies below that surface (i.e. the roots that feed the tree). Furthermore, despite the compelling developments being introduced by mood management research, it still tends to maintain U&G’s focus on particular types of localized media-specific motives rather than forwarding a more general

understanding of the basic motivational processes underlying media evaluation and selection.

Thus far, research which has addressed basic goals as predictors of media selection has produced mixed results. Knobloch-Westerwick, Bruck, and Hastall (2006), for instance, found neither affiliation (i.e. relatedness) nor achievement (i.e. competence) motives to be related to selective reading of affiliation- and achievement-related news. It should be noted, however, that Knobloch-Westerwick and associates measured goal activation and attention to the news stories in ways that may have obscured the relationship. Goal activation was measured via self-report on the affiliation and achievement motive subscales of the Personality Research Form (Jackson, 1994) and attention was measured as reading time on articles that had been categorized as related to affiliation and achievement in a highly deliberative manner during a pretest (e.g. agreement with the statement “The story is all about social/interpersonal relationships”). More importantly, there is no indication in the report that the goals in question were active during the period in which selective exposure was measured. The participants' goal states were not manipulated, a requirement evidenced in recent research (e.g. Ferguson, 2008). In contrast, Fenigstein and Heyduk (1985) randomly assigned participants to goal-priming conditions (specifically affiliation and aggression goals) and then (in an ostensibly separate subsequent study) had them rate their interest in viewing a selection of media segments for which brief synopses were provided. The authors found that those participants who had been primed with particular goals were more likely to select or rate more highly descriptions of segments that were relevant to the goal they were primed with. Curiously and, I would argue, unfortunately, this line of research was not advanced. Subsequent U&G studies did not build on this work.

While Fenigstein and Heyduk provide support for the notion that basic motives influence selective exposure to media, their speculative discussion of explanatory mechanisms assumes

that separate motives which are ancillary to the ones under examination are at work when people use media. The authors specifically touch upon self-evaluative, justifying, and desensitization processes as potential underlying mechanisms. They pose the possibility that people may be drawn to media content that helps them evaluate themselves through social comparison (Festinger, 1954). They provide the example of using sexually explicit content as a means of evaluating one's own sexual behavior. In addition, they question if people use media to justify their own behavioral tendencies like watching violent content in order to find justification for their own aggressiveness.

The focus on ancillary and media-specific motives may be an unnecessary step to take. The case has already been made that humans process media as if it were an unmediated experience (Reeves & Nass, 1996). We should take this understanding forward and examine whether or not media, just like the unmediated world, is processed automatically according to one's state of goal pursuit. My basic question is this: Are basic goals pursued automatically through selective media exposure? To answer this we must apply a better understanding of goal processes in our investigations.

Final Words

The purpose of this review has been to present a novel conceptual framework with which to investigate the evaluation and selection of mediated messages with a focus on entertainment media. The integration of recent developments in understandings of implicit goal processes offers a wealth of new findings and theoretical advances for this area to draw on. The model of functional media evaluation and selection forwarded here, along with the conceptual ideas presented, are initial steps in this direction which I hope will inspire future work in this area. However, the context of evaluation and selection is just one of a variety of potential areas that

might be advanced by integrating research on implicit goal processes. Future discussions should address how this research might impact investigations of how messages are processed, how we engage with narratives, and how mediated messages influences us and society as a whole.

Overview of the Current Research

There were two main objectives for the studies reported below. The first was to develop a means for measuring implicit attitudes towards narrative stimuli. Existing implicit measures are unsuitable for complex stimuli such as that represented by narrative messages. Establishing a procedure for applying such measures was thus a crucial initial step in developing a research program which targets implicit goal processes in the context of mediated messages. If successful, the process of developing this procedure would at the same time provide a measure of the implicit goal relevance of the stimuli which I would then use to test the influence of implicitly activated goals on the evaluation and selection of narrative messages. Chapter 2 presents the development and testing of this procedure.

The second objective was to investigate the influence of active non-conscious goals on evaluations of and selective exposure to narrative media. Chapter 3 reports the process and results of testing the following hypotheses:

H1. Active implicit goals will increase positivity towards narratives which foreground goal-relevant information. Goal-relevant information is defined in the current context as depictions of goal striving, goal-facilitative means, or goal end-states.

H2. Active implicit goals will increase selective exposure to narratives which foreground goal-relevant information.

CHAPTER 2

The Marker System:

A Procedure for Using Implicit Measures with Mediated Messages

In the study of mediated messages, some of the most useful and widely used pieces of information we can gather are the audiences' evaluations of them. Gathering these evaluative responses has been performed almost exclusively with a series of explicit questions asking respondents to rate messages on a variety of scales. Such a method is appropriate if the question these measures are meant to address concerns what individuals consciously think and feel. However, if one is interested in processes outside the individual's range of awareness or if one is interested in examining socially sensitive topics, this method does not suffice. It is well known that this method is highly susceptible to various social and psychological factors such as the participants' own theories regarding their attitudes as well as social norms and presentational pressures. Each of these factors can influence responses and obscure the evaluative picture from which we draw our conclusions. This is particularly true in the study of socially sensitive topics such as racial attitudes (e.g. Fazio, Jackson, Dunton, & Williams, 1995; Greenwald, McGhee, & Schwartz, 1998) though the problem is omnipresent. To the extent that a response can be consciously controlled by respondents, the potential influence of cognitive processes outside the researcher's domain of interest is something to be concerned about. Such concerns have prompted calls for more unobtrusive measures (Crosby, Bromley, & Saxe, 1980; Dovidio & Fazio, 1992) and have motivated the development and growing use of a variety of implicit measures which are less susceptible to these factors. Furthermore, when it comes to the study of motivated media viewership, particularly for entertainment media, audiences are unlikely to be

completely aware of the reasons they are drawn to and like particular types of messages or the narratives, situations, characters, actors, etc. that they depict. Explicit manipulations and measures provide a view of a cognitive landscape that is both limited and colored by the participant's consciousness. Implicit manipulations and measures offer the potential to both expand and clarify this view.

Perhaps the most important aspect of the development and application of these tools is their contribution to understandings of attitudinal processes in general and specifically of the well-established disconnect between traditional (explicit) attitude measures and observed behavior. In research on implicit goal processes, implicit attitude measures have been shown to be more and, in some cases, uniquely capable of capturing the influence of active goals on both goal-relevant evaluations and behaviors (Ferguson, 2007, 2008; Ferguson & Bargh, 2004; Sherman, Presson, Chassin, Rose, & Koch, 2003). Ferguson (2008) suggests that, because implicit evaluations are generated rapidly and spontaneously, they may be more reflective of the influence of the active goals under investigation than explicit evaluations.

Applying Implicit Measures to Mediated Messages

Thus far, implicit attitude measures such as the implicit association test (IAT; Greenwald et al., 1998), the affect misattribution procedure (AMP; Payne, Cheng, Govorun, & Stewart, 2005), and the evaluative priming paradigm (Fazio, Sanbonmatsu, Powell, & Kardes, 1986) have measured attitudes toward single words or letters and static images. In the evaluative priming paradigm, participants are briefly (e.g. 150 ms) exposed to a priming word to activate associated mental constructs and evaluations. This prime is followed by a positive or negative adjective which they are instructed to classify as positive or negative. Researchers interpret the speed with which participants classify these adjectives as an indication of the positivity or negativity that

was activated by the priming stimuli. For instance, if participants are faster at categorizing positive adjectives (vs. negative adjectives) after having been primed with a particular stimulus, we can infer that perception of the stimulus activated more positivity than negativity and thus was associated more strongly with positivity in the participant's memory.

The brief exposure times required by these tools present an obvious obstacle for their application to the study of messages. Ranging from a brief health statement to hours of narrative entertainment, such messages can depict a world of complex stimuli whose relations to each other change over the course of their duration. Use of these tools requires simplifying how that complexity is represented. One way of doing this is to associate message stimuli with otherwise neutral simpler stimuli such as those that have been used with these measures in the past (i.e. single words or images) and then measuring attitudes towards these “markers”.

Evidence suggests that subjects can learn such associations quickly and that markers can function in the same way as more direct representations of the construct in question. Shah and Kruglanski (2003) found that newly learned associations between the words *red* and *green* and an achievement goal could implicitly prime the goal. Similarly, Ferguson and Bargh (2004) informed participants that they would receive more points in a word game for constructing *nouns* from a set of lettered tiles if they included the letter *C*. Participants who were primed with an achievement goal demonstrated implicit positivity for the word *noun* and the letter *C*.

Overview of the Current Study

The purpose of this study was to develop and test the marker procedure for use in my main study. Because that study would involve measuring the impact of active goals on implicit evaluations of goal relevant film synopses, to be considered effective, the marker procedure needed to result in the creation of simple stimuli that could represent these more complex

synopses as priming stimuli in the implicit evaluation measure. To represent the synopses, these markers needed to be capable of activating the goal relevant content of the synopses which would then activate associated evaluations in the main study. I chose to test the marker procedure within a primed lexical decision task (LDT) paradigm (Meyer & Schvaneveldt, 1971) which is a common method for implicitly measuring construct activation. In this method, strings of letters which form either construct-related words, unrelated words, or nonsense words are presented for participants to quickly categorize as words or non-words. Construct activation is indicated by participants correctly recognizing and categorizing construct-related words faster than unrelated words. In the primed variant of this method, a stimulus is briefly presented just prior to the presentation of each letter string. This allows one to test for associations between the priming stimulus and a particular construct. An association is indicated by participants responding faster to construct-related words after being exposed to the critical prime rather than a neutral prime. For this study, the marker would be the critical priming stimulus. If the marker procedure was effective at associating the content of the film synopses with the marker, participants would categorize a synopsis-related construct faster after first being exposed to the marker in comparison to when they were first exposed to a neutral priming stimulus. Such a result would at the same time verify the construct- or goal-relevance of the synopses using a less deliberative method than that used in developing the synopses and in previous research (e.g. Knobloch-Westerwick et al., 2006). What follows is a report on the fifth and most promising of five versions of the procedure I tested.

Method

Overview of the Current Method

In this study I initially chose to operationalize the goal construct using affiliation and

competition goals. The decision to use two goals was informed by a concern to increase the generalizability of the results. The choice to use affiliation and competition was informed by the importance of building on prior research in goal processes where these two goals, or similar ones (e.g. social vs. achievement goals), are commonly used (e.g. Bargh et al., 2001; Fenigstein & Heyduk, 1985; Ferguson, 2008; Knobloch-Westerwick et al., 2006; Lakin & Chartrand, 2003). I decided to focus the latter goal on competition rather than achievement more broadly in an attempt to differentiate the two goals as much as possible. There was also a practical reason underlying the choice of goals which was that I could draw on prior research for stimuli and measures. As will be explained below, I ended up limiting the current version of the apparatus to the affiliation goal.

This was a pretest-posttest primed LDT design. Participants were told they would be completing several tasks. The first task was explained as a series of word recognition tasks. This was the first of two identical LDT sessions and served as a baseline measure of response latencies. Participants then read one of two movie synopses (randomized between subjects) which pretesting had established as involving themes which were oriented more towards affiliation than competition or achievement. The synopsis was followed by several general questions about it. The purpose of these questions was to strengthen the association between the content of the synopsis and its title, which, if the procedure was functional, would serve to prime the content of the synopsis in the subsequent LDT session. Participants then completed the posttest LDT followed by a demographics questionnaire.

Materials and Apparatus

Movie synopses. Eight movie synopses were initially developed using synopses from a popular online movie database (Netflix) as models. Four of the synopses were developed and

tested to emphasize affiliative themes and four were developed and tested to emphasize competitive themes using the work of McClelland and Steele (1972) as a guide. Each synopsis was then evaluated separately for goal relevance by 82 students in a classroom in exchange for candy. Thus, for each synopsis, at least 10 students responded to six questions which asked them to indicate on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*) the extent to which they felt “*The story is all about (personal relationships, friendship, being together, competition, personal achievement, winning)*” (Knobloch-Westerwick et al., 2006). Four synopses (two affiliative, two competitive) were then selected by comparing their scores on both affiliative and competitive dimensions (highest score on one dimension, lowest on second dimension). As it turned out, the synopses within each pair could also be categorized as pertaining either to college life or standard Hollywood fare. The final synopses along with their affiliative and competitive scores are provided in Appendix A.

Markers. The synopses were given titles (*PRINT, TREES*, randomized between subjects) selected from groups of words which had been used as neutral priming words in previous studies (e.g. Ferguson, 2007). These title words served as critical priming words in the lexical decision tasks (explained below).

Association strengthening questions. Participants were asked to respond to 15 general questions about the synopses. This served to strengthen the association between the content of the movie synopses and their titles (e.g. *Which movie genre do you think PRINT would best be characterized by?*). The goal in developing these questions was to have participants think about the content of the synopses in conjunction with their titles without conflicting with the affiliative theme. This strategy was informed by the classical associative network model of memory (Anderson & Bower, 1973; Collins & Loftus, 1975; Higgins, 1996; Neely, 1977; Posner &

Snyder, 1975; Shiffrin & Schneider, 1977) which, as mentioned earlier in the discussion of how goals are thought to be represented in memory, posits that knowledge is represented and organized in memory in associative networks built upon the co-activation of mental representations or constructs driven by a process of accessibility, associational strength, and spreading activation. The goal here was to strengthen the association between the titles and content of the synopses through repeated, salient, and, of course, recent co-exposure with a series of moderately engaging but otherwise neutral questions. See Appendix B for the complete set of questions.

Lexical decision paradigm. Presentation of experimental stimuli was controlled by the DirectRT software package (Jarvis, 2010) on Dell PCs equipped with 15-in CRT color monitors (set to 800 x 600 resolution, 80Hz refresh rate) and DirectIn High Speed Button-Boxes (Jarvis, 2010). Participants were seated at a distance of approximately 18 in. from the computer screen. The LDT procedure was modeled after prior research using the LDT paradigm with subliminal presentation of priming stimuli (e.g. Wittenbrink, Judd, & Park, 1997, 2001). As illustrated in Figure 2, in each trial, participants were asked to focus on a fixation point (*) which appeared at the center of a black screen screen for 1,000 ms in 16-point white Ariel font (this was the same for all stimuli). The fixation point was replaced by a priming word in all capital letters which appeared for 12-14 ms (one refresh cycle) and was immediately overwritten by a masking stimulus (XXXXXX, Rayner, 1978) which remained on the screen for 250 ms. The masking stimulus was replaced by a lowercase target letter sequence which remained on the screen until the participant categorized it as a word or non-word by pressing one of the buttons on the button-box. A blank screen then appeared for 1,500 ms before the next trial began.

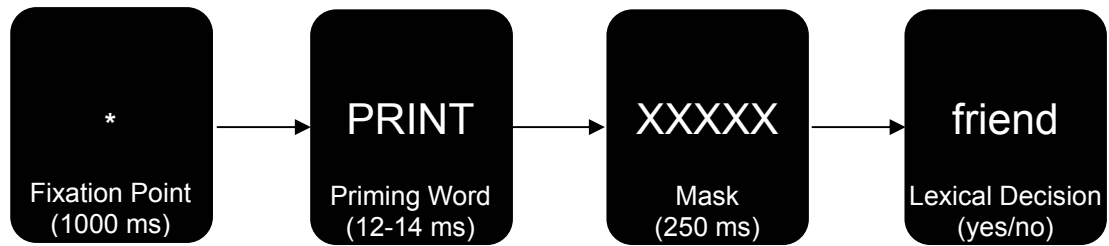


Figure 2. Example of a single LDT trial with a critical prime (*PRINT*) and affiliation target (*friend*).

Each of the two LDT sessions were identical and included five blocks of 12 trials for a total of 60 trials per session. Each trial presented each of the two critical primes (*PRINT*, *TREES*; only one of the two functioned as a critical prime, randomized between subjects) or the neutral prime (*BLANK*; Dien, Franklin, & May, 2006) paired with a target word or nonsense word for the participant to classify. Within each block, each prime was presented four times - once with a target word used in previous research to represent the affiliation construct (e.g. *partner*; Bargh et al., 2001; Fenigstein & Heyduk, 1985; Lakin & Chartrand, 2003), once with a word used in relevant previous research as a neutral target (e.g. *sidewalk*, Fenigstein & Heyduk, 1985; Ferguson, 2007, 2008), and twice with nonsense-word targets (e.g. *windobs*). Nonsense-word targets were created by changing one letter in a word that had been matched with a word target by number of syllables, approximate frequency of occurrence, and number of letters (Neely, 1977). The first block was preceded by six practice trials. See Appendix C for a complete list of the word and nonsense word stimuli used in the study. Figure 3 provides a graphical representation of the entire procedure.

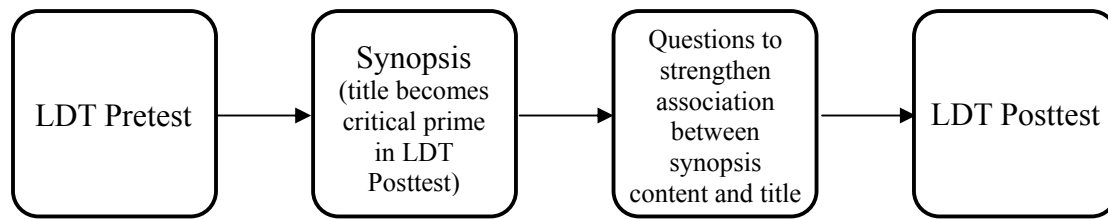


Figure 3. Overview of the test of the Marker Procedure.

Demographics. At the end of the study, participant were asked their gender, age, class level, and whether English was their first language.

Summary of Methodological Changes from Previous Versions

Four other versions of the experimental apparatus were tested prior to the current version. These versions included both affiliative and competitive synopsis types, in some cases within-subject, in others varied between-subjects. Results across these versions varied from 3 ms to 6 ms of facilitation in the affiliative context and 16 ms of facilitation to 31 ms of inhibition in the competitive context. It was the consistent facilitation in the affiliative context that led me to try to strengthen the paradigm within the affiliative context in the final version described above. What follows is a description of what I tried in order to prevent needless duplication in the future. It is important to note here that earlier versions did not include a pretest instance of the lexical decision task. This makes it impossible to know exactly how the associative procedure and synopses were affecting response latencies to the various primes and targets in those earlier versions. As such, the various components of the earlier versions of the marker procedure and their tests may have been more effective than I believed them to be at the time and so should not be ruled out without further testing using a pretest-posttest design.

General design. Aside from lacking a pretest, several initial versions also presented two synopses together followed by strengthening questions for both synopses before the only

instance of the LDT, which tested both markers, was administered. This may have been muddling the associations between the markers and their synopses as well as introducing too much complexity in the LDT. Some prior versions also presented the two synopses and their associated strengthening questions as separate units each with their own LDT session (ie. synopsis1 → questions1 → posttest1 → synopsis2 → questions2 → posttest2).

Movie synopses. As noted earlier, prior versions also used both affiliative and competitive synopses. This may have created noise in the response latencies which could be diminished by using only one type of synopsis. Prior to excluding the competitive synopsis however, I made several modifications to it. One of these modifications is worth mentioning here. The initial competitive synopsis focused on a character who was determined to get into a good university. I changed this to a character already in a university setting who was determined to get a high-paying job upon graduating. The decision to make this change was informed by comments from participants who indicated that the process of getting into a good university was no longer relevant to them. As current students of a major research university, they had already attained that goal.

Markers. I experimented with different types of markers in prior versions (*MOTION/SIGHT*, *DAX/MID*) before finally settling on single-syllable words that had been used as neutral word primes in previous related studies (*PRINT/TREES*).

Association strengthening questions. Over the course of developing the marker procedure, I omitted and added questions whose function were to make participants think about the synopses in conjunction with the markers (their titles) to strengthen the association between the two stimuli. The following open-ended items were omitted from the procedure because of their potential for introducing noise into the procedure:

- *Please type 2 things you can remember about TITLE.*
- *Enter the name of a movie or television show you've seen or heard about that seems similar to TITLE.*
- *Enter the name of (or briefly describe) a fictional character that you think might be similar to one in TITLE.*
- *Enter the name of (or briefly describe) an actor/actress you think might fit one of the lead roles in TITLE.*

Lexical decision tasks. The most significant change to the lexical decision task instrument was a shift from brief supraliminal (250 ms) presentation times for the primes to subliminal (12-14 ms) presentation. While supraliminal presentation is not uncommon for applications of primed lexical decision tasks, subliminal presentation is often preferred when the priming stimuli is likely to cause distraction or encourage self-presentation (e.g. Shah, Friedman, & Kruglanski, 2002; Wittenbrink et al., 1997, 2001). Several early participants recognized the supraliminal primes as the titles of the movies they had just read about. Because this recognition might influence response latencies, I decided to make the change to subliminal presentation for the priming stimuli. Though longer presentation times have been used for subliminal presentation, testing with the software and equipment at hand is critical for assuring stimuli intended to be presented subliminally are actually presented subliminally. Multiple tests, video driver updates, and checking of DirectRT logs for actual presentation times led me to the briefest possible presentation time of 12-14 ms or one monitor refresh cycle.

I also tested different neutral priming words and non-words before settling on *BLANK* (*****, *NEUTRAL*, *NEUTRA*, *ZET*). Prior research is inconsistent in its choice of neutral priming stimuli (e.g. CCC, Kawakami, Dion, & Dovidio, 1998; unrelated words, Shah et al.,

2002; XXXXX, Wittenbrink et al., 1997, 2001). My choice to use *BLANK* was based on the fact that it had been recommended as a good neutral prime after rigorous testing (Dien et al., 2006).

Language question. Earlier versions did not ask participants if English was their first language. Given the linguistic basis of the lexical decision task, these items were added to be able to check if familiarity with the English language influenced response latencies.

Current Procedure

Upon arrival to the lab, participants were given a consent form to sign and then seated at individual cubicles where they completed the study on a computer. After some basic instructions informing them that they would be completing several tasks and to read all instructions carefully, participants completed the pretest instance of the LDT. The LDT was described as a series of word-recognition tasks. For each trial, they would first see an asterisk for them to focus on followed by a string of letters (XXXXXX) to prepare them for the categorization task. A second string of letters would then appear, some of which would form correctly spelled English words and others which would form nonsense words. They were to indicate, using the button box in front of them (with two buttons labeled *YES* and *NO*), whether the final string of letters formed a correctly spelled english word (*YES*) or not (*NO*). Finally, participants were instructed to concentrate on responding as quickly and accurately as they could and to press the spacebar when they were ready to begin.

Once they had completed the pretest instance of the LDT, they were informed that they would be reading the first of two movie synopses and answering a few questions about it afterward. In actuality, they would only read one synopsis. The synopsis would appear for 40 seconds after which additional instructions would appear. They were to read the synopsis as if they were browsing for a movie to watch and to ask themselves if it was a movie they wanted to see. They

were told to pay particular attention to the title as they would be asked questions about the synopses later and they would be referred to by their titles. Finally, they were instructed to review the synopsis if they finished reading it before the instructions appeared and to press the spacebar when they were ready to read the first synopsis. The synopsis was then presented and followed by the association strengthening questions. To maximize exposure to the synopsis and its title, the questions appeared one at a time below the synopsis and its title. The final strengthening question which asked participants to type the letter corresponding to the first letter in the title of the movie appeared below the synopsis with its title removed.

After completing the strengthening questions, participants completed a brief demographics questionnaire, were debriefed using a funneled debriefing questionnaire (Bargh & Chartrand, 2000), informed of the full purpose of the study, and thanked.

Data preparation

Some participants reported during debriefing that they had seen something flash on the screen prior to the presentation of the target words they were asked to categorize. However, only two participants recognized these priming stimuli as the movie title. Data from these two participants were excluded from the analysis. The data from a third participant who failed to follow the instructions and was responding to the lexical decision tasks with only one hand was also excluded from analysis. The data from a fourth participant was excluded as this participant reported not having learned English until age 12. The data from the remaining 18 participants was prepared and analyzed.

Incorrect responses ($N=15$ or 1% of 1140 responses) and reaction times (RTs) that were faster than 150 ms ($N=0$) or slower by more than three standard deviations from each individual's mean ($N=19$ or 2% of the remaining 1125 trials) were excluded (Blair & Banaji, 1996;

Kawakami, Dion, & Dovidio, 1998; Ratcliff, 1993; Wittenbrink et al., 1997). Because a general practice effect could be expected to reduce all response latencies in the posttest LDT, I planned to compare levels of facilitation in trials with neutral and critical primes. I computed two sets of facilitation scores for trials with affiliative targets by subtracting response latencies in the posttest LDT session from response latencies in the pretest LDT session. I did this separately for trials with the neutral prime and trials with a critical prime. I also computed facilitation scores in the same manner as above for trials involving both a neutral prime and target.

Results

If the marker paradigm was effective in transferring the affiliative orientation of the synopses to the markers, then the difference in response latencies between the pretest and posttest LDTs should have been larger in trials with affiliative targets that were preceded by a critical prime compared to trials with affiliative targets that were preceded by the neutral prime. This would indicate an additional amount of facilitation beyond a mere practice effect in recognizing affiliative words from being first exposed to a marker for an affiliative synopsis rather than a neutral word. In order to test this, I conducted a repeated measures analysis of variance (ANOVA) on the affiliative facilitation scores with prime type (neutral, critical) as a within-subjects factor. I included critical word (*TREES*, *PRINT*) and synopsis version (college, Hollywood) as between-subjects factors and the facilitation scores of the neutral-prime/neutral-target trials as a covariate to account for individual differences in response latencies. The test revealed no significant effects. Though, on average, facilitation between the pretest and posttest LDTs was stronger for trials with a critical prime ($M = 54.03$ ms, $SD = 64.24$) than for trials with a neutral prime ($M = 21.96$ ms, $SD = 80.62$), this additional facilitation of 32 ms did not reach a conventional level of statistical significance, $F(1, 14) = 2.31, p = .15$ (See Figure 4).

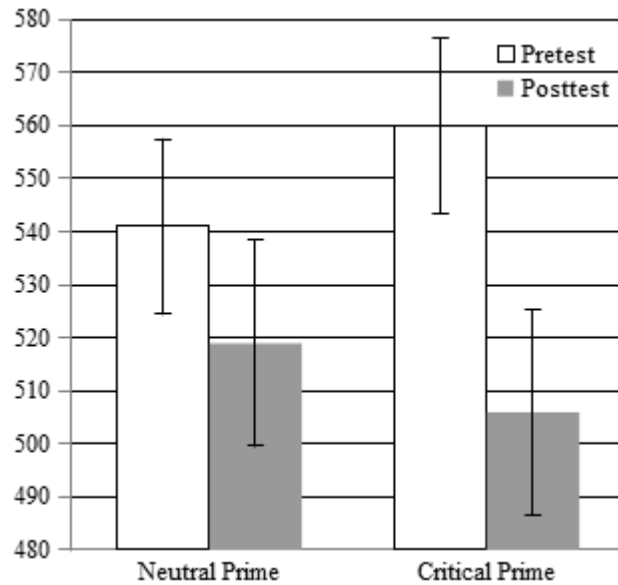


Figure 4. Response latencies (in milliseconds) for affiliative targets as a function of priming with standard error bars.

Discussion

Though small, the additional facilitation reported here is comparable to that found in previous studies. Studies which have applied a similar primed lexical decision paradigm have found statistical significance with mean differences ranging from 37 ms down to 6 ms (e.g. Blair & Banaji, 1996; Kawakami et al., 1998; Shah & Kruglanski, 2003; Wittenbrink et al., 1997, 2001). The obvious difference here is a participant pool less than half the size of the smallest group used in those studies ($N = 40$, Shah & Kruglanski, 2003) and far fewer than the 80 participant average of the other studies. A post-hoc power analysis using PASS (Hintze, 2011) suggested I would need an additional 50 participants to achieve 0.80 power and a p-value of 0.05 with the current design.

Though promising, the impulse to proceed with the current version of the marker procedure was tempered by an investigation of the pattern of mean facilitation scores within each combination of marker word and synopsis version. One observation of note was that facilitation

with critical priming only appeared to have surpassed facilitation with neutral priming when the critical prime was the marker *TREES*. Mean facilitation scores were nearly equivalent when the critical prime was the marker *PRINT* (See Table 1). Two possibilities come to mind regarding this difference. First, it is possible that nouns function differently from verbs or words that can

Table 1

Mean Response Facilitation for Affiliative Targets Across LDT Sessions (in Milliseconds) by Priming, Synopsis Version, and Marker

Version	Marker	Neutral Prime	Critical Prime	Row Mean	N
College	TREES	27.90	58.39	43.14	4
Hollywood	TREES	-39.63	44.03	2.20	6
College	PRINT	63.68	59.36	61.52	4
Hollywood	PRINT	66.70	59.35	63.03	4
Column Mean		21.96	54.03	38.00	18

function as both a noun and a verb as is the case for the word *PRINT*. Second, it is possible that *TREES* has more preexisting associations with the affiliation construct than does *PRINT* making it more readily associated with the construct. The word's referents, trees, are more likely to be represented as goal-driven animate beings in popular media (e.g. Lord of the Rings' Ents, Harry Potter's Whomping Willow). They can be the object of affection (e.g. tree-huggers). They can

be nurtured, harmed, and protected. This is not so much the case for *PRINT*. Complicating this interpretation however, the marker word and synopsis version only appear to differentiate facilitation scores in the neutral priming trials and not in the critical priming trials.

This highlights the need to either include a pretest when using implicit measures or conduct sufficient pilot testing prior to administration. The test reported here of course was a test of a single condition (affiliation synopsis) rather than a comparison between multiple conditions. Ordinarily, a design involving multiple conditions would not require a pretest-posttest design. However, it would be worthwhile to consider including a pretest even in multi-condition designs, if only as a subsequent step to investigate unexpected results. Our trust in the ability of multiple operationalizations to minimize the effect of individual operationalizations must be tempered by acknowledging the potential power of the individual operationalization to overpower the others, especially when practical constraints of time or resources dictates fewer operationalizations than one would wish. This, along with the fact that the associations individuals have between constructs in memory are as dynamic as the culture and individual experiences that produce them, demand that we take special care to insure our instruments are valid. What may function as a neutral prime one day may activate social goals the next. Who could predict that the word *sideways* would become associated with wine snobbery before the movie *Sideways* was released?

A second conclusion to take away from this study is the value in carefully considering the different levels of the construct under investigation along with the value of simplicity in the design of implicit methodology. While the ability to apply numerous repeated measures is one of the great strengths of existing implicit paradigms, its use should be restricted to very discreet levels of the construct under investigation. A within-subjects test which presents multiple

representations of a particular goal construct (e.g. affiliation OR competition) will be more powerful than a within-subjects test of the goal construct in general (e.g. affiliation AND competition). One must weigh carefully when deciding on the balance between the value of generalizability across discreet constructs (e.g. affiliation AND competition) to validate conclusions regarding a more general construct (e.g. goals), the value in comparing discreet constructs (e.g. affiliation vs. competition vs. neither), the resources available to the researcher (N , time, etc.), and the validity of the conclusions one is able to draw from the results. In the current context, effectively testing multiple goals within-subjects requires testing more than two goals multiple times within-subjects. Given that each instance of goal measurement requires 60 LDT trials to be effective, such a design is not feasible given constraints on participant time and cognitive and physical resources. Add to this the fact that the stimuli used to measure goal activation are the same stimuli used as primes to implicitly manipulate goal activation. This necessitates randomizing the order in which the goals are presented between subjects, a practice which, in my experience, has never simplified the interpretation of results. Testing multiple goals between- rather than within-subjects is the logical choice. In the current study, limiting the goal construct to a single example of a goal for within-subjects testing with multiple representations of that single goal was more effective than including multiple goals for within-subjects testing. Without the ability to effectively measure multiple examples of a construct, a within-subjects test of more than a single discreet construct provides no practical benefit and complicates and challenges the validity of one's interpretation of results. The decision of which level of a more general construct will be effectively tested using repeated measures can come only from a thorough understanding of how the different levels of your construct relate to each other.

CHAPTER 3

The Influence of Implicitly Activated Goals on Evaluations and Selection of Entertainment

Messages

This study addressed the hypotheses that active implicit goals will increase positivity (H1) and selective exposure (H2) to narratives which foreground goal-relevant information. Although implicit measures have been shown to be more effective at capturing the influence of implicitly activated goals (Ferguson, 2007, 2008; Ferguson & Bargh, 2004; Sherman et al., 2003), the lack of a suitable procedure with which to do this for complex narrative stimuli required moving forward with explicit measures of entertainment evaluations.

Participants were first primed with either an affiliation goal, a competition goal, or neither goal. They then read two narrative synopses which summarized the plots of an affiliative relationship oriented film and a competitive achievement oriented film. In order to empirically establish whether or not goal processes were at work, half of the participants read the synopses immediately after being primed with a goal while the other half first completed a delay task. After reading the synopses, participants responded to explicit attitude and selection measures.

Method

Participants

Two hundred ninety one undergraduate students (181 females) from a major research university participated in the experiment in exchange for course credit.

Materials

In order to prime the affiliation goal, the competition goal, or neither, participants completed a scrambled sentence task (Srull & Wyer, 1979) which has been shown to activate a goal outside the participant's awareness (e.g. Ferguson, 2008). Participants were shown 30 four-word groups

from which two three-word sentences could be formed. In the affiliation goal priming condition, fifteen of the 30 word groups included words related to an affiliation goal (e.g. *friend find a make*) (Bargh et al., 2001; Fenigstein & Heyduk, 1985; Lakin & Chartrand, 2003). In the competition goal priming condition, the fifteen critical word groups included words related to a competition goal (e.g. *them him against compete*) (Kawada, Oettingen, Gollwitzer, & Bargh, 2004; Bargh et al., 2001; Kay, Wheeler, Bargh, & Ross, 2004). The critical word groups in the neutral priming condition along with the remaining 15 filler word groups in all conditions consisted entirely of words unrelated to both affiliation and competition goals (e.g. *window the open umbrella*) (Aarts, Custers, & Holland, 2007; Bargh et al., 2001; Fenigstein & Heyduk, 1985; Ferguson, 2007, 2008; Kawada et al., 2004) (See Appendix D for the complete list of word groups).

In the delay condition, participants completed a map task for 6 minutes in which they were asked to draw a general map of the local area. The delay provided by this task has been successful in prior work of this kind to confirm the involvement of goal processes in the observed effects (Ferguson, 2008). Simply activating a construct could increase interest and evaluations of narratives related to that construct (Fenigstein & Heyduk, 1985). Such an effect, however, will be short-lived. Introducing a delay task between the priming manipulation and exposure to stimuli will allow for a non-motivational priming effect to diminish. Observing an influence of the priming manipulation on evaluations after the delay will provide evidence that goal processes influenced the evaluations.

Two sets of movie synopses which were pretested for goal relevance were used as the targets of evaluation (see Methods in Chapter 2). Each of the two sets consisted of one affiliative and one competitive synopsis. One set focused on college life settings (e.g. competitive students and

friendly college roommates). The other set consisted of standard Hollywood fare (e.g. an ex-CIA agent is called back into duty to save the world and two star-crossed lovers overcome social barriers to their relationship) (See Appendix A for the complete synopses).

Dependent Measures

Evaluation. Evaluation measures were drawn from studies on implicit motivation as well as from communication research on entertainment. The first evaluation item asked participants to provide an overall rating for each synopsis on an 11-point scale ranging from 1 (*very bad*) to 11 (*very good*) (Ferguson, 2008; Ferguson & Bargh, 2004). Four additional items asked participants to indicate the extent to which each synopsis was *interesting*, *enjoyable*, *boring*, and *absorbing* on 7-point scales ranging from 1 (*not at all*) to 7 (*very much*) (Oliver, 2008).

Selection. One item appeared after the set of evaluation measures which asked participants to indicate how much they would like to watch a clip from the movie they had just evaluated on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*) (Krcmar, Greene, Banerjee, & Bagdasarov, 2008; Park & Raney, 2006). After both synopses had been read and evaluated separately, a final dichotomous selection item asked participants which of the two movies they would prefer to watch.

Procedure

Upon arrival to the lab, participants were given a consent form to sign, seated in front of a computer, randomly assigned to a condition, and instructed to follow the instructions on the screen. A brief introductory screen provided an overview of the study which was described as a study of linguistic and evaluative processes involving several computerized tasks. They were then asked to click on a button at the bottom of the screen when they were ready to begin. The computer then presented the scrambled sentence task appropriate to the assigned goal or non-

goal condition. On each of 30 randomly ordered screens, a set of four words appeared above a box into which participants were instructed to type a logical and grammatically correct three-word sentence from the words provided.

Following the priming task, half of the participants completed the delay task. The task was described as a simple task intended to clear their mind and they were told that they did not need to provide much detail. A pencil and sheet of paper was available at their station for this task. They were instructed to continue drawing until the computer screen flashed a few times and instructed them to proceed to the next task. After 6 minutes, the screen flashed three times with instructions to proceed to the next task.

Either immediately following the priming task or after the delay task, participants were instructed to read one of the two randomly assigned sets of movie synopses as they would if they were browsing for a movie to watch and to ask themselves if each was a movie they would watch. Participants then read both synopses, presented separately and in random order, answering the series of evaluative questions after each one. Each synopsis remained on the screen for a minimum of 30 seconds at which point instructions appeared informing participants of which key to press to proceed to the next screen. This initial appearance of each synopsis was followed immediately by the evaluative questions. Each of the evaluative questions appeared below the movie synopsis such that the synopsis the participants were responding to was visible throughout the evaluation process. After reading and evaluating each of the two synopses, the two synopses were presented together and participants were asked which of the two movies they would like to watch.

At the end of the study, participants completed a brief demographic questionnaire. They were then informed that the study had ended and were administered a funneled debriefing

questionnaire (Bargh & Chartrand, 2000) to assess their awareness of the affiliative or competitive themes, the relationship between the different components of the study, and the true purpose of the study. They were then informed of the full purpose of the study, thanked, and dismissed.

Data Preparation

Evaluation Scale Construction

Given the mixed use of individual items with 11- and 7-point scales and the intent to average the items together, all evaluation items were standardized prior to analysis. The full set of evaluation items were first submitted to a bivariate correlation analysis. All affiliative evaluation items were strongly and positively correlated with Pearson coefficients ranging from .49 to .78, all *p-values* < .001. Similarly, all competitive evaluation items were strongly and positively correlated with Pearson coefficients ranging from .54 to .80, all *p-values* < .001. There were no significant correlations between items in different sets though most trended toward negative correlations. Principle component analysis of the full set of evaluation items using a minimum eigenvalue of 1 as its criteria for detecting factors revealed two factors corresponding to the two sets of items. The affiliative items produced factor loadings ranging .67 to .79 on the first factor. The competitive items loaded onto the second factor at .64 to .79 and negatively on the first factor. Finally, scale reliability analyses conducted on each set of items revealed good reliabilities with Cronbach's alpha scores for the affiliative and competitive scales reaching .91 and .90, respectively. In no case would exclusion of an item have improved the reliability of either scale. Thus, all items were retained. Each of the two groups of items was averaged to form separate standardized indexes for evaluations of the affiliative and competitive synopses.

Results

Evaluations

To test the hypothesis that active implicit goals will increase positivity towards goal-relevant narratives (H1), I conducted a repeated measures ANOVA on the evaluations with order of presentation, movie set (college life, Hollywood), goal priming (affiliation, competition, neutral), timing (immediate, delay), and the interaction between priming and timing entered as between-subjects factors and synopsis type entered as the within-subjects factor. As is common practice and in light of the prevalence of gender effects in related literature (which I discuss later), I also entered gender as a covariate in the model.

Neither goal priming nor the interaction between goal priming and timing interacted significantly with synopsis type to influence evaluations, $F(2,282) = 0.48, p > .6$ for the main effect of priming; $F(2,282) = 0.10, p > .9$ for the interaction between priming and timing. The omnibus test did reveal a significant interaction between gender and synopsis type, $F(1,282) = 19.88, p < .001$. To explore this interaction, I conducted separate repeated measures ANOVAs for males and females with order of presentation and movie set¹ entered as between-subjects factors and synopsis type entered as the within-subjects factor. According to these analyses, females tended to evaluate the affiliative synopsis type more positively ($M = 0.17, SD = 0.80$) than the competitive type ($M = -0.05, SD = 0.86$), $F(1,178) = 8.60, p < .01$. Males, on the other hand, tended to evaluate the competitive type more positively ($M = 0.08, SD = 0.83$) than the affiliative ($M = -0.28, SD = 0.88$), $F(1,107) = 10.30, p < .01$. To investigate how the evaluations of males and females compared for each synopsis type, I ran separate univariate ANOVAs on each of the evaluations with order of presentation and movie set entered as fixed factors and gender entered as a random factor. Females tended to evaluate the affiliative synopsis type more

¹ Both order of presentation and movie set were significant factors in the omnibus test (both $ps < .001$).

positively than did males, $F(1,287) = 22.43, p < .001$. Regarding the competitive synopsis type, though males tended to evaluate the competitive synopsis type more positively than did females, this difference did not reach conventional levels of statistical significance, $F(1,287) = 2.30, p = .13$.

Selective Exposure

To test the influence of goal priming on selective exposure (H2), I ran the same repeated measures ANOVA test I used for testing evaluations but with desire to watch a clip from each of the synopsis types as the within-subjects factor. None of the tests involving priming condition revealed any statistically significant differences (all $ps > .8$). However, as was the case with the evaluations, the within-subjects tests revealed an interaction between synopsis type and gender, $F(1,282) = 25.05, p < .001$. In line with the evaluation results, males expressed a greater desire to watch a competitive clip ($M = 7.19, SD = 2.52$) than an affiliative one ($M = 5.26, SD = 2.76$), $F(1,107) = 30.77, p < .001$. Females, on the other hand, provided statistically equivalent responses to both the affiliative ($M = 6.55, SD = 2.56$) and competitive ($M = 6.34, SD = 2.71$) synopsis types, $F(1,178) = 0.76, p > .3$. To compare the selections of males and females within each synopsis type, I again ran separate univariate ANOVAs for each synopsis type. Both tests revealed a significant gender effect. Females expressed a greater desire to watch an affiliative synopsis than did males, $F(1,287) = 16.10, p < .001$. In contrast, males expressed a greater desire to watch a competitive synopsis than did females, $F(1,287) = 7.97, p < .01$.

To test the influence of goal priming on selective exposure (H2) using the dichotomous measure of movie selection (affiliative vs. competitive), I conducted a binary logistic regression. I regressed the selection measure on order of presentation, movie set, gender, priming condition, and timing condition (immediate vs. delay), along with the interaction between priming and

timing.² Once again, none of the tests involving priming condition revealed any statistically significant differences (all $ps > .3$). The analysis did again yield a main effect of gender ($B = 0.67$, $SE = 0.13$, Wald's $\chi^2 = 24.89$, $p < .001$) as well as main effects of presentation order ($p < .01$) and movie set ($p < .05$). Subsequent testing revealed that 59% of female participants selected the affiliative (vs. competitive) synopsis type while 71% of male participants selected the competitive type, $\chi^2(1, N = 291) = 24.72$, $p < .001$.

Exploratory Analysis

With neither hypothesis finding support in the planned analyses, I explored additional factors that might help both explain the null effects and reveal avenues for future research. Expectancy-value theories of goal pursuit (e.g. Lewin et al., 1944; Tolman, 1955; Vroom, 1964) predict goal pursuit as a multiplicative function of the value individuals attribute to a goal and their subjective expectancy for achieving that goal. In light of this understanding along with the results of previous research which found the influence of active goals on evaluations to be moderated by the importance the individual attributed to the goal in question along with the individual's perceived ease at pursuing the goal (e.g. Ferguson, 2008), I included measures of goal value and subjective-expectancy as part of the demographic questionnaire at the end of the experimental procedure. Though gender was clearly an important factor in predicting evaluations and selective exposure, a secondary purpose in the exploration was to focus the investigation on functional processes without necessarily “cleaning” the data of the gender component. As I discuss below, subsequent analyses might compare the predictive power of both factors.

² I used contrast dummy variables to model priming and timing conditions. For priming, one dummy variable compared the affiliation priming condition (coded 1) to the neutral priming condition (coded -1). The competition priming condition was coded as 0. A second dummy variable compared the competition priming condition (coded 1) to the neutral priming condition (coded -1). Here, the affiliation priming condition was coded as 0. The variable for timing condition coded the immediate condition as -1 and the delay condition as 1. I used contrast coding to model gender, presentation order, and movie set as well.

Expectancy-value measures. Participants responded to four items for each goal modeled after items used in prior research (e.g. Aarts et al., 2005; Ferguson, 2008; Ferguson & Bargh, 2004). The items were developed in accordance with the expectancy-value (EV) model of goal striving described earlier. For the affiliation goal, two items measured the value of the goal by asking participants to indicate on 11-point scales ranging from 1 (not at all) to 11 (very much) how important they felt it was to have good friends and how desirable they felt it was to socialize. Two additional items measured subjective expectancy by asking participants to indicate on the same scale how difficult they felt it was to make new friends (reverse-coded) and how likely they thought it was that they would make new friends over the next year. For the competition goal, two items asked participants to indicate how important and desirable they felt it was to have a competitive advantage over other people. The subjective expectancy measures asked participants how difficult they felt it was to outperform other people (reverse-coded) and how likely they thought it was that they would outperform other people the next time an opportunity arose.

The items which measured affiliation goal value were positively correlated ($r = 0.33, p < .001$) and thus averaged together into a single affiliation goal value index. The items which measured competition goal value were also positively correlated ($r = 0.70, p < .001$) and thus averaged together into a single competition goal value index. Likewise, the items which measured affiliation goal expectancy were positively correlated ($r = 0.40, p < .001$) and thus averaged together into a single affiliation goal expectancy index. Finally, the items which measured competition goal expectancy were also positively correlated ($r = 0.33, p < .001$) and thus averaged together into a single competition goal expectancy index. In accordance with the expectancy-value model, I multiplied each goal value index by each participant's subjective

expectancy score to create a single goal EV index for each goal.

Prior to exploring EV as a predictor of entertainment evaluations and selective exposure, I regressed each of the EV measures on presentation order, movie set, gender, priming condition³, timing condition, and all two- and three-way interactions between priming condition, timing conditions, and gender. For affiliation EV, the main effects model revealed a significant influence of movie set ($B = 3.31$, $SE = 1.40$, $t = 2.37$, $p < .05$) along with marginally significant influences of gender ($B = 2.70$, $SE = 1.44$, $t = 1.87$, $p = .06$) and the dummy variable which contrasted the affiliation priming condition to the neutral priming condition ($B = 3.62$, $SE = 1.96$, $t = 1.85$, $p < .07$). The Hollywood movie set, being a female, and being primed with affiliation were each associated with higher affiliation EV scores. The full model with all interactions entered revealed a significant two-way interaction between priming condition (affiliation vs. neutral) and gender ($B = 4.29$, $SE = 2.07$, $t = 2.07$, $p < .05$) which was qualified by a three-way interaction with timing condition ($B = 4.20$, $SE = 2.07$, $t = 2.03$, $p < .05$). For competition EV, the full model revealed only gender as having a significant influence with males being associated with higher competition EV scores ($B = 6.81$, $SE = 1.36$, $t = 5.02$, $p < .001$). As such, I standardized EV separately for males and females to create EV scores relative to the mean for each gender. Given the influence of priming and timing conditions on affiliation EV scores, I limited my exploration to competition EV. Given that the explanation of any interactions involving affiliation priming and competition EV would be beyond the scope of this study, I

³ I modeled priming condition in each of the two analyses (affiliation EV, competition EV) using two sets of contrast-coded dummy variables. In the analysis of affiliation EV, one dummy variable contrasted the affiliation condition to the neutral condition with the affiliation condition coded as 1, the neutral condition as -1, and the competition condition as 0. The second dummy variable contrasted the affiliation condition to the competition condition with the competition condition coded as -1 and the neutral condition as 0. For the analysis of competition EV, I coded the competition condition as 1 in both dummy variables. I used the same dummy variables in the exploratory analyses of entertainment evaluations where EV was modeled as a predictor.

further limited the exploration by excluding the affiliation priming condition from the data set. Thus, I limited my exploration to the potential influence of competition EV, priming condition (competition vs. neutral), and timing condition on evaluations of and selective exposure to competitively-oriented entertainment options.

Evaluations. I used linear regression analyses to explore the influence of competition EV and its interaction with goal activation on evaluations of the competitive synopses. I first entered the control variables for presentation order and movie set. In the second step, I entered priming condition (competition vs. neutral), timing condition, and the interaction between priming and timing conditions. I then added competition EV, and all two- and three-way interactions between EV, priming condition, and timing condition as a third step. As expected, the model which included priming and timing conditions did not improve prediction beyond the control model ($R^2_{\text{change}} = .002, p > .9$). The model with EV and its interactions with priming and timing conditions did improve prediction over the prior two models ($R^2_{\text{change}} = .05, p < .05$). The coefficient for the main effect of competition EV approached significance ($B = 0.11, SE = 0.06, t = 1.83, p = .07$) with higher EV being associated with more positive evaluations. The coefficient for the interaction between priming, timing, and EV was significant ($B = -0.17, SE = 0.06, t = -2.84, p < .01$). To investigate the interaction between priming and EV across conditions, I regressed the evaluations on order of presentation, movie set, and EV within each of the four priming (neutral, competition) and timing (immediate, delay) cells (N per cell ~ 50).⁴ In the immediate condition, the only significant predictor when competition was not primed was movie set. When competition was primed, EV approached significance as a predictor with higher scores being associated with more positive evaluations ($B = 0.27, SE = 0.15, t = 1.76, p = .09$).

⁴ Note: Gender ratios in each cell were similar to the ratio across all participants (~60% female) with reasonably equal gender ratios in each half of the EV scale within each cell.

This result is consistent with prior research finding goal striving more predictive of evaluations of goal facilitative stimuli when the goal is active (Ferguson, 2008). In the delay condition, competition EV was a significant predictor in the neutral priming condition ($B = 0.30, SE = 0.12, t = 2.54, p < .05$). In the competition priming condition, there was no linear relationship between EV and evaluations ($B = 0.01, SE = 0.10, t = 0.13, p = .90$). As graphically displayed in Figure 5, curve estimation analyses suggested a cubic function as a good fit for the data in this cell ($B = -0.10, SE = 0.50, t = -1.94, p = .06$).

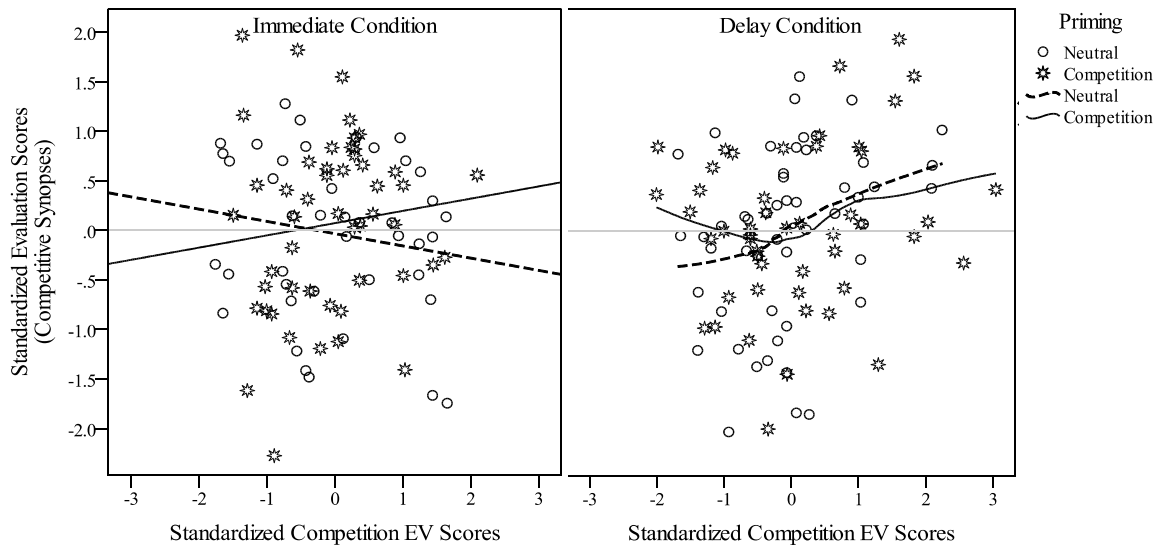


Figure 5. Standardized evaluation scores for competitive synopses by standardized EV scores and priming conditions within each timing condition. The graph for the immediate condition uses a linear function to model the data. The graph for the delay condition uses Loess lines fitting 85% of data points (Epanechnikov method) to display the cubic nature of the data in the competition priming condition.

These results support the idea that there is a functional component to how we evaluate even entertainment options, which is in line with previous research on the functional nature of how we

evaluate environmental stimuli in general. In this case, when a competition goal was active, evaluations of competitively oriented movie synopses improved according to how likely an individual was to pursue a competition goal. More specifically, when the goal was active, evaluations improved according to how valuable the competition goal was to individuals as well as how likely they felt it was that they could achieve success in pursuing the goal. The fact that this positive relationship between EV and greater positivity toward the competitive synopses was maintained only by competitively-primed individuals who scored near or above the mean on the expectancy-value measure provides additional evidence that goal processes, rather than a superficial and short lived interest based on semantic matching, were at work. However, the fact that this relationship may have become negative for individuals below the mean with evaluations improving as EV decreased is interesting ($B = -0.46$, $SE = 0.27$, $t = 1.72$, $p < .1$) and worth discussing.

Selective Exposure. Exploratory analysis for the continuous variable which measured desire to view a clip from a competitive movie was conducted in identical manner to the analysis of evaluations just discussed. As was the case for evaluations, the model which included EV and its interactions with priming and timing conditions improved prediction ($R^2_{\text{change}} = .06$, $p < .05$) over the model with only priming and timing conditions and control variables, which itself did not improve prediction over the control model alone ($R^2_{\text{change}} = .001$, $p > .9$). Here, the coefficient for the main effect of competition EV was significant ($B = 0.51$, $SE = 0.20$, $t = 2.52$, $p < .05$) with higher EV scores associated with greater desire to view a competitive clip. Again, this finding was qualified by an interaction between competition EV, priming condition, and timing condition ($B = -0.49$, $SE = 0.20$, $t = 2.42$, $p < .05$). Results for the immediate condition matched those that were found in the exploration of evaluations in that competition EV only predicted

desire to view a competitive clip when the competition construct or goal had been activated ($B = 1.40, SE = 0.47, t = 3.01, p < .01$). In the neutral immediate condition, EV did not predict desire ($B = -0.34, SE = 0.46, t = -0.74, p > .4$). The pattern of results in the delay condition were also similar to the evaluation results. Competition EV marginally predicted desire in the neutral condition ($B = 0.72, SE = 0.40, t = 1.79, p = .08$). As illustrated in Figure 5, in the neutral condition, EV appeared better at predicting desire for individuals relatively low (compared to relatively high) on the EV scale. In the competition priming condition, the mean of the EV scale appeared to effectively differentiate desire, though the coefficient for EV did not approach significance in either a linear or curvilinear analysis (all $ps > .2$). As illustrated in Figure 6, the relationship between EV and desire to watch a competitive movie clip is relatively flat in the competition priming condition except for a rapid rise and then leveling off in desire around the mean EV score. However, a simple ANOVA comparing participants above the mean to those

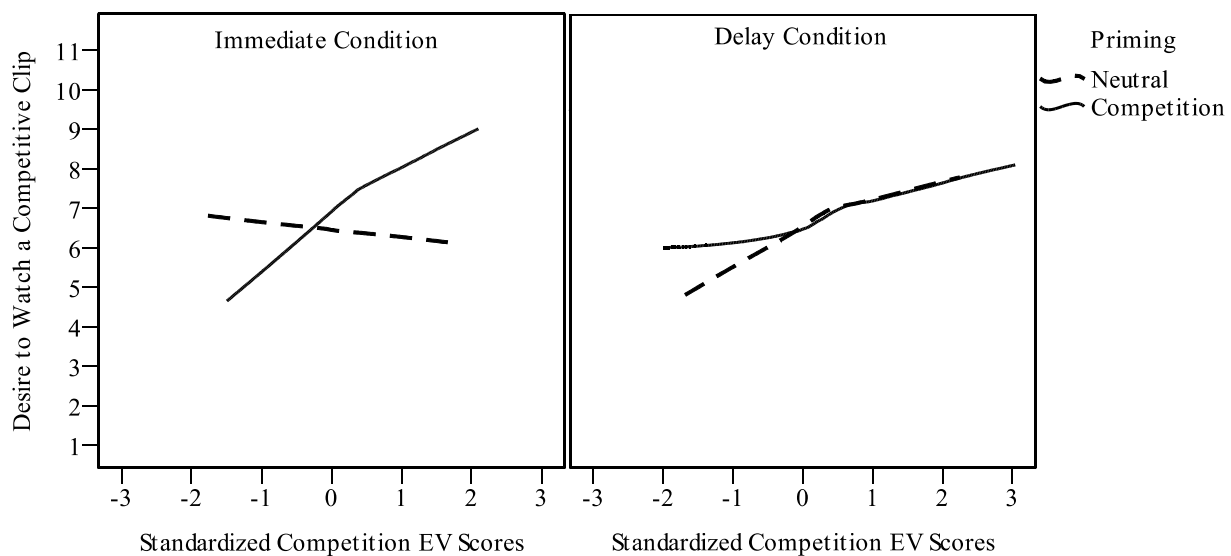


Figure 6. Desire to watch a competitive movie clip by standardized competition EV scores and priming conditions within each timing condition. The graphs use Loess lines fitting 99% of the data points (Epanechnikov method).

below the mean only approached significance, $F(1, 46) = 3.33, p = .08$. Thus, though the findings for desire to watch a competitive clip are in line with prior research and suggest that implicitly activated goals can influence even entertainment preferences, the fact that this result really only shows up in the immediate condition and was not statistically maintained after a delay ultimately does not support the conclusion. Furthermore, the reversal in pattern observed in the neutral condition on opposite sides of the delay is curious and deserves discussion. I will return to this topic in the general discussion below.

Similar exploration of the dichotomous selection variable (competitive synopses coded 1 vs. affiliative synopses coded 0) using logistic regression revealed both the main effect of competition EV ($B = 0.33, SE = 0.17, \text{Wald's } \chi^2 = 3.94, p < .05$) as well as the three-way interaction between EV, priming condition, and timing condition ($B = -0.54, SE = 0.17, \text{Wald's } \chi^2 = 9.97, p < .01$). Deconstruction of the interaction revealed a two-way interaction between EV and priming only in the immediate condition ($B = 0.83, SE = 0.28, \text{Wald's } \chi^2 = 9.11, p < .01$). When no goal was primed, participants with *lower* competition EV scores were more likely to choose the competitive synopsis ($B = -0.78, SE = 0.38, \text{Wald's } \chi^2 = 2.36, p < .05$). When competition was primed, participants with *higher* competition EV scores were more likely to choose the competitive synopsis ($B = 0.81, SE = 0.42, \text{Wald's } \chi^2 = 3.78, p = .05$) (See Table 2). After the delay however, competition EV did not significantly predict selection in either priming condition (both $ps > .1$). Examining the percentages however reveals a similar pattern to the previous analyses with evaluations and desire to view a clip. Participants in the delay condition were generally more likely to choose a competitive synopsis than an affiliative one across priming conditions and EV levels, though high EV participants were evenly split in the

competition priming condition (See Table 3).

Table 2

Percentages of participants choosing affiliative and competitive synopses by competition EV for each priming condition within the immediate timing condition.

Priming Condition	Competition EV	Selection	
		Affiliative Synopsis	Competitive Synopsis
Neutral	Low EV	40%	60%
	High EV	70%	30%
Competition	Low EV	56%	44%
	High EV	32%	68%

Table 3

Percentages of participants choosing affiliative or competitive synopses by competition EV for each priming condition within the delay timing condition.

Priming Condition	Competition EV	Selection	
		Affiliative Synopsis	Competitive Synopsis
Neutral	Low EV	45%	55%
	High EV	36%	64%
Competition	Low EV	39%	61%
	High EV	50%	50%

Discussion

Study 2 tested the hypotheses that active goals would increase positivity (H1) and selective exposure (H2) to entertainment options featuring goal-relevant information such as depictions of goal striving, goal-facilitative means, or goal end-states. Neither hypothesis was supported by the results. What was found was a fairly consistent gender effect with males demonstrating greater positivity and selective exposure to competition-oriented options than females and females demonstrating greater positivity and selective exposure to affiliation-oriented options than males. The fact that males and females tended to prefer different types of movies in this study is not surprising. The preference for more aggressive competitive achievement-oriented content among males and content oriented more towards non-competitive or nurturing interpersonal relationships among females has been documented across cultures in studies of media preferences in childhood and adulthood (Hansen & Hansen, 2000; Knobloch, Callison, Chen, Fritzsche, and Zillmann, 2005; Oliver, 1993, 2000; Potts, Dedmon, and Halford, 1996). Explanations for this difference have tended to focus on general personality differences with numerous theories and speculations regarding the roots of those differences. Eagly (1987) foregrounds the influence of social norms and conventional gender roles. Others posit the importance of media-based socialization (Bandura, 2001; Gerbner, Gross, Morgan, Signorelli, & Shanahan, 2002). Evolutionary psychologists speculate about the evolutionary advantages bestowed upon agreeable women who nurture their children (Buss, 1995). Biological explanations posit hormonal differences as giving rise to differences in interests and behaviors (e.g. Berenbaum, 1999). While some thought has been given to functional factors underlying gender differences, such as the social functionality associated with receiving positive feedback for expressing gender-consistent orientations (e.g. Eckes & Trautner, 2000), there remains a

great need for empirical evidence to this effect grounded in a thorough integration of what is known about how goals function both consciously and nonconsciously.

This study builds on prior communication research which has examined gender differences in goal orientation to predict selective attention to mediated messages. Namely, females tend to be more affiliative than males and males tend to be more competitive than females and this has been used to predict selective attention to goal relevant messages, such as news messages, but with limited success. As mentioned earlier, Knobloch and associates (2006) found no influence of affiliation and achievement motives on selective exposure to goal-relevant news stories. This null result was replicated here in the exploratory analyses of expectancy value when no goal was activated (i.e. in the immediate condition with neutral priming). This null result appeared in the context of evaluations and selective exposure. The fact that a positive relationship between evaluations and goal EV appeared only when the relevant goal was active (and/or after a delay) replicates research on implicit goal processes (e.g. Ferguson, 2008) and advances research in this area of communication research. Furthermore, standardizing competition EV separately for each gender and testing its influence with an acceptable male-to-female ratio across the range of the measure helps strengthen the focus of discussion on the functional factors underlying such gender differences. As mentioned earlier, future analyses might test for the ability of functional factors to predict evaluations and selective exposure above and beyond gender designations.

The results of this study also advance research within the U&G and selective exposure paradigms more generally through its use of goal measures that are consistent with the dominant and empirically supported conceptualization of goal striving which posits striving as a function of both the importance and subjective expectancy of achieving the goal. Speaking directly to U&G research, this study also provides data from a randomized experiment which manipulated

goal activation rather than relying solely on self-report of individual differences in goal strength.

By focusing on evaluations of fictional narratives involving human characters, this study contributes to the study of goal processes in general by extending the domain of generalizability to entertainment choices as well as person perception. For individuals with average to above average EV for a goal, when the goal is active, evaluations of goal relevant entertainment options improve in relation to their EV level. In contrast to U&Gs conceptualization of the nonfunctional diversionary entertainment consumer, this finding suggests that the synopses were processed and evaluated, at least to some extent, in a functional manner. Further exploration into each of the components of the expectancy-value equation could reveal whether one is more influential than the other or if they are truly most predictive in combination within the entertainment and person perception domain. Further exploration of this sort could also shed light on the reversal that was observed in this pattern wherein participants below the mean on EV evaluated the synopses more positively as they receded from the EV mean. Nabi et al. (2006), Knobloch-Westerwick, Hastall, and Rossman (2009), and Moskowitz (2002) provide evidence of greater interest in goal relevant messages (reality television, newsmagazine articles, and words in a Stroop task, respectively) when the goal is under duress. Finding that participants in this study who fell below the mean on EV did so primarily as the result of lower goal expectancy (rather than goal value) would support such an explanation. Another possibility for this reversal could be explored by examining the affiliation EV measure. Individuals can relate to fictional characters in various ways. Whereas a highly competitive person might look to a highly effective character for inspiration and knowledge about effective behaviors in a competitive context, individuals with low competitive expectancy or highly affiliative individuals might look to the same character for support or protection. In other words, whereas the first individual

might process the character as a model for the self (i.e. *being* the character), the latter individual might process the character in an entirely different way (i.e. *being with* the character).

Investigating this possibility would provide a valuable addition to the literature on identification with mediated personalities and characters.

Finally, results from this study may contribute to the discussion of implicit versus explicit measurement in the study of goal processes, a topic I will return to in the general discussion below.

Limitations

Several methodological caveats require discussion. First, as is clear in the scatterplots which presented evaluations of (Figure 5) and desire to watch (Figure 6) competition-oriented films by priming, timing, and competition EV, along with the abundance of marginally significant results, the models are highly susceptible to the influence of just a few extreme values which tempers confidence in the results. Second, and perhaps more importantly, the goal striving measures were collected at the end of the experimental procedures which, as evidenced by the affiliation goal measure, means the measures are susceptible to the influence of the instrument itself.

Future studies would do well to collect these measures several days prior to administering the manipulations. A more compelling method might be to administer the measures on multiple occasions under a variety of circumstances or contexts prior to experimental manipulation to reduce the impact of other situational factors that may influence goal striving. Another alternative is to find measures that are themselves less susceptible to situational influence.

Ferguson's (2008) use of GPA as a measure of skill at an academic achievement goal is a useful example to consider. On the other hand, the fact that the affiliation priming manipulation was able to shift scores on the affiliation EV measure evidences the effectiveness of the priming

manipulations for activating goals rather than mere semantic constructs, a crucial distinction to be able to make in this research.

A third methodological concern is the validity of the delay task used in this study. Examination of the neutral priming condition before and after the delay raises a question. Why might the evaluations of individuals in the neutral priming condition become more similar to those in the competition priming condition after the delay? One possibility is that the act of drawing a map may be capable of activating a competition goal for some individuals (particularly for students at an Ivy League university where the study was conducted). The fact that several female participants in the current study apologized to the experimenter for what they judged to be poor map drawing skills further supports this possibility. This suggests that, at least for some, the delay task was perceived as a challenge which they could either succeed or fail in. Future research should investigate alternative delay manipulations which are themselves less likely to act as priming manipulations.

CHAPTER 4

General Discussion

The preliminary results in these studies provide sufficient grounds to move forward with investigations into the functional factors underlying the evaluation and selection of entertainment options. As I will discuss below, they also suggest moving forward with both explicit and implicit methodologies as both serve important and different purposes.

Implications for Communication Theory Development

The results of Study 2 suggest that entertainment evaluations and perhaps selection are influenced by goal strength, but only when the goal is active. Regardless of whether it is measured implicitly or explicitly, chronic goal orientations alone, a common measure in prior selective exposure research, may simply be insufficient to influence evaluations and selection. The fact that males and females differed in the measures of expectancy-value and that expectancy-value can influence evaluations and selection also suggest that gender differences in media evaluations and selective exposure may be at least partially explained by goal differences.

However, beyond the limitations already discussed in Chapter 3, Study 2 only examined a single goal which limits generalization to goals in general. Furthermore, only a single form of entertainment was examined, which limits generalization to mediated entertainment as a whole. Finally, the use of explicit measures of evaluation precludes any inference one might otherwise make regarding a node activation model of memory being at work.

Future research

Initially, the design used in Study 2 should be modified and administered with pretest-posttest measurement of expectancy-value for both affiliation and competition goals. This would help clarify the relationship between goal activation and expectancy-value observed. That study

should also randomize synopsis type between- rather than within-subjects given the significant effect of order at almost every level of analysis. This would simplify the design and help reduce the influence of a non-critical study element on dependent measures. Running the synopses through a clean (i.e. without the strengthening questions used in Study 1) pretest-posttest non-primed LDT which tests for affiliation and competition activation before and after synopsis exposure would help confirm the appropriateness of the synopses for the study. I discuss the use of the LDT paradigm as a pilot testing tool below.

Given the prevalence of gender effects in the selective exposure literature future research should further explore the functional underpinnings of gender differences in media evaluation and selection. Understanding the extent to which these gender differences are the result of motivational differences and the extent to which they might not be would help advance both theory development and communication practice.

Beyond pre-selection evaluation and selective exposure, this functional approach to investigating communication processes will find fertile ground throughout what Slater (2007) refers to as the “reinforcing spirals of selectivity and effects” that encompasses media selection, exposure, and influence. I propose modifying this phrase to the reinforcing spirals of *functional* selectivity and effects. Beyond influencing our initial evaluations and choices, how do active goals influence us during exposure? How do active goals influence our attention to specific aspects of characters and situations or our online interpretations and evaluations of them. Can accounting for goal activation and expectancy-values help predict and explain how viewers relate with characters? Can it help us understand why some viewers fully identify with a character or media personality while others form less psychologically integrated or internalized parasocial relationships with them? Given the influence of factors such as selective attention,

interpretation, and identification on what it is we take away from the mediated environment back into our more consequential unmediated lives, how does this all come back around to influence our motivational states? If we process mediated characters and situations as models of goal pursuit, we should expect influences on the value we attribute to different goals, our perceived expectancy of achieving those goals, the means with which we pursue them, and perhaps even shifts in more basic approach/avoid tendencies.

Methodological implications

In the study of goal processes, decisions about methodology are both critical and complicated. Conflicting findings across investigations of goal processes might be explained by the fact that implicit and explicit measures address different questions. Using explicit evaluation measures, Study 2 found that, for individuals with relatively low EV scores, evaluations of goal-relevant synopses increased as EV scores decreased. One explanation was that people may become interested in information related to important goals that they do not feel particularly capable of achieving or goals currently in a state of conflict. Such an explanation has found support in previous studies (e.g. Moskowitz, 2002; Nabi et al., 2006; Knobloch-Westerwick et al., 2009). However, other research has found no such negative relationship, suggesting individuals automatically evaluate goal-relevant information positively when one's skill at a goal is relatively high. A key difference between these two sets of findings is the methodology used to collect the data with the first using explicit measures and the latter using implicit ones. One explanation for this is that each type of measure addresses different components in the goal striving equation. We are more than automatically activated nodes and interconnections between cognitive constructs just as we are more than what we consciously perceive and feel. Whereas implicit measures are able to more effectively capture the automatic workings of those interconnections

in a manner less biased by the participant's personal theories and self-presentational tendencies (i.e. what associations they have learned), explicit measures tell us about the individual's conscious experience – what they are consciously thinking and feeling. Both are important components which come together to influence goal striving. Implicit evaluation measures can tell us the extent to which someone associates useful environmental stimuli with positivity which can in turn facilitate success at a goal by pushing the individual towards those useful things. Explicit measures of perceived difficulty and confidence in succeeding at a goal, however, can tell us about their perceived expectancies (i.e. how confident they feel about achieving the goal). Both are important factors in goal pursuit. Both are at work in how we live our lives. Both should be studied if we are to better understand why we do what we do and how we do it.

The field of communication has been actively advancing the relatively controlled, conscious, explicit side of this functional picture. I suggest that it begin developing the automatic, the nonconscious, the implicit side of the investigation using better tools. Particularly (though not exclusively) in the context of socially sensitive topics, implicit manipulations and measures (e.g. evaluations, construct activation, behavior) have consistently provided responses less subject to the social and personal biases I pointed to earlier. This is due to the fact that participants are less likely to be aware of the purpose for which a measure or manipulation is being administered and/or how it works. In regards to implicit measures, participants are also less capable of controlling their responses. As such these manipulations and measures offer improved accuracy of measurement and a stronger basis from which to draw conclusions about the cognitive associations that influence us.

Implicit tools can also improve the effectiveness and validity of critical components of traditional research designs. For instance, developing experimental stimuli should rely on more

than surface and external validity as is currently standard practice. Just as we cannot or will not accurately report what associations come to mind when we see a brown face, neither can we or our pilot participants provide definitive judgments regarding what constructs and evaluations a particular message brings to mind. Given our anthropomorphic capacities and tendencies, is any nature film really a neutral stimulus (e.g. Oliver, Weaver, & Sargent, 2000)? Even if our intent is to provide an irrelevant stimulus, we cannot know what associations are being activated without an implicit measure of construct activation like the lexical decision paradigm. In the study of implicit processes, it is of critical importance to avoid administering stimuli that are either irrelevant to the goals under investigation or also relevant to incompatible and conflicting goals as this may result not only in perplexing results but inaccurate conclusions. By comparing LDT response patterns observed after exposure to a variety of potential stimuli (I suggest one stimulus per LDT session per participant), the ones that are most relevant to the goal or orientation under investigation and least relevant to potentially confounding goals can be selected. Given the capacity of message stimuli themselves to activate goals (Aarts et al., 2004), such a method can also help reduce the possibility of inadvertently activating an unwanted goal during the experimental procedure.

Perhaps one of the more challenging tasks is developing or deciding on an appropriate measure of selection. Given the importance of using measures that reduce the participants' abilities to consciously control their responses, explicit questions regarding the extent of one's desire to view particular selections or the likelihood of making particular selections should be avoided. In this case, a measure of actual reading time such as that used by Knobloch-Westerwick et al. (2006) is a compelling option as participants are less likely to become aware of the nature of the measure when a skillfully developed cover story is presented to them. Existing

psycho-physiological measures (e.g. skin-conductance, heart rate, eye-tracking) which have been used to capture online nonconscious changes in arousal (which might reasonably be interpreted as an indicator of goal activation/tension) and attention should also be considered. In order to develop a better understanding of the entire cognitive picture, we might even conduct controlled comparisons of different implicit and explicit tools in our research to establish which pieces fit best to reveal different parts of the puzzle.

APPENDIX A

Movie Synopsis Stimuli

Affiliative Synopses

College Life Set. A drama about the ups and downs experienced by roommates Mary and John as they make their way through college. Sharing good times and supporting each other through the bad, they discover the surprises of relationships, the challenges of college life, and the joy in sharing it all with a loyal companion. (M affiliative score = 18.18, M competitive score = 8.09, maximum possible score = 21)

Hollywood Set. Struggling young songwriter John, out of ideas, short of cash, and in need of something to keep him going meets his ideal woman, Mary. The only problem is her privileged social sphere won't allow for such a romance. Amidst the challenges they must face just to see one another, a love ensues that inspires John to create his most famous song with Mary as its celebrated singer. (M affiliative score = 13.54, M competitive score = 10.54, maximum possible score = 21)

Competitive Synopses

College Life Set. College junior James wants nothing more than to get a high paying job right out of school. The problem is his cutthroat classmates want the same thing and will use every trick in the book to get it. Using his razor sharp abilities to solve every challenge they throw at him, he sets out to beat his peers while maintaining his own sense of honor. (M affiliative score = 4.31, M competitive score = 16.08, maximum possible score = 21)

Hollywood Set. An ex-CIA agent, known only as James, trained with a unique set of investigative and combat skills, is brought in from retirement to stop a former agent-turned-terrorist and his network of unscrupulous saboteurs from causing a global meltdown. He soon

realizes that to succeed he must put to use every ounce of his precision and expertise. (M
affiliative score = 7.42, M competitive score = 15.00, maximum possible score = 21)

APPENDIX B

Association Strengthening Questions for the Marker Procedure

- Which movie genre do you think TITLE would best be characterized by?

How typical do you think TITLE is for that genre? (1=Not at all typical, 5=Very typical)

- How typical do you think TITLE is for the genre:

ROMANTIC COMEDY (1=Not at all typical, 5=Very typical)

COMEDY (1=Not at all typical, 5=Very typical)

DRAMA (1=Not at all typical, 5=Very typical)

ACTION (1=Not at all typical, 5=Very typical)

ADVENTURE (1=Not at all typical, 5=Very typical)

- How likely do you think it is that TITLE will feature many:

OUTDOOR scenes? (1=Not at all likely, 5=Very likely)

INDOOR scenes? (1=Not at all likely, 5=Very likely)

- How likely is the following type of scene to appear in TITLE?

The characters share a meal. (1=Not at all likely, 5=Very likely)

The characters attend a party. (1=Not at all likely, 5=Very likely)

A character in crisis is comforted by another character. (1=Not at all likely, 5=Very likely)

- Does TITLE seem more like a TV show or a movie? (1=TV show, 2=Movie)

- How would you be most likely to watch TITLE? (1=Movie Theater, 2=Television, 3=DVD Rental, 4=Other)

- Press the key corresponding to the first letter in the title of this movie.

APPENDIX C

Lexical Decision Task Stimuli

Word Primes

PRINT, TREES, BLANK

Critical (Affiliation) Word Targets

affiliate, friend, nurture, partner, together

Neutral Word Targets

ballpoint, neutral, bucket, river, medium, staple, mountain, switch, mustard, umbrella

Non-word Targets

bonches, greebery, praduct, surtle, chails, malonaise, purpote, tobles, clant, murpose, sibewalk,
windobs, edifoce, outsode, stodaway, woather, gasopine, pivement, suilding, yamp

APPENDIX D

Goal Priming Stimuli

Affiliation Primes

a make find friend
good be partners become
try agree affiliate to
things do find together
boy the hug girl
with cooperate agree her
the nurture enjoy connection
friends him with agree
warmly it kindly express
with connect her socialize
her with unite him
about through talk it
ally find an seek
try unite work to
her with associate him

Competition Primes

him them against compete
opposition dominate your the
the battle opponent rival
lead the take prize
game competition master the
the battle control continue
ground your defend stand
front stay in get
triumph the savor enjoy
the outshine surpass others
prevail strive fight to
best the be first
argument win contest the
before them her finish
aim prepare victory for

Neutral Primes

ballpoint use sidewalk the
carpet hair the shampoo
bucket the carry lamp
the umbrella open window
follow river a path
that enter exit building
mix a make salad
the some wind hear
pavement trees the touch
weather check product the
background container the fill
switch ball a find
turtle the observe zebra
another city visit park
hat your adjust wear

Neutral Filler Primes (All Conditions)

cross bridge road a
pencil image the sharpen
pour drink juice some
the replace picture color
sheets shirt the fold
paint repair wall the
the feed walk dog
water gasoline the pump
music to for listen
table the use dryer
the seat recline chair
plant corner turn the
the ranch see mountain
a take nap bus
the gather arrange paper

References

- Aarts, H., Chartrand, T.L., Custers, R., Danner, U., Dik, G., Jefferis, V.E., & Cheng, C.M. (2005). Social stereotypes and automatic goal pursuit. *Social Cognition*, 23, 465-490.
- Aarts, H., Custers, R., & Holland, R. W. (2007) The nonconscious cessation of goal pursuit: When goals and negative affect are coactivated. *Journal of Personality and Social Psychology*, 92, 165-178.
- Aarts, H., Gollwitzer, & P. M., Hassin, R. R. (2004). Goal contagion: Perceiving is for pursuing. *Journal of Personality and Social Psychology*, 87, 23-37.
- Anderson, J. R., & Bower, G. H. (1973). *Human associative memory*. Washington, DC: Winston & Sons.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3, 265-299.
- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (2nd ed., pp. 1-40). Hillsdale, NJ: Erlbaum.
- Bargh, J. A., & Chartrand, T. L. (2000). The mind in the middle: A practical guide to priming and automaticity research. In H. Reis & C. Judd (Eds.), *Research methods in social psychology* (pp. 253–285). New York: Cambridge University Press.
- Bargh, J. A., & Gollwitzer, P. M. (1994). Environmental control of goal-directed action: Automatic and strategic contingencies between situations and behavior. In W. D. Spaulding (Ed.), *Nebraska symposium on motivation: Vol. 41, Integrative views of motivation, cognition, and emotion* (pp. 71–124). Lincoln: University of Nebraska Press.
- Bargh, J. A., Gollwitzer, P. M., Lee-Chai, A., Barndollar, K., & Trötschel, R. (2001). The

- automated will: Nonconscious activation and pursuit of behavioral goals. *Journal of Personality and Social Psychology*, 81, 1014–1027.
- Bartsch, A., Vorderer, P., Mangold, R., & Viehoff, R. (2008). Appraisal of emotions in media use: Toward a process model of meta-emotion and emotion regulation. *Media Psychology*, 11, 7-27.
- Berenbaum, S. A. (1999). Effects of early androgens on sex-typed activities and interests in adolescents with congenital adrenal hyperplasia. *Hormones and Behavior*, 35, 102-110.
- Blair, I., & Banaji, M. (1996). Automatic and controlled processes in stereotype priming. *Journal of Personality and Social Psychology*, 70, 1142-1163.
- Buss, D. M. (1995). Psychological sex differences: Origins through sexual selection. *American Psychologist*, 50, 164-168.
- Cesario, J., Plaks, J. E., & Higgins, E. T. (2006). Automatic social behavior as preparation to interact. *Journal of Personality and Social Psychology*, 90, 893-910.
- Chartrand, T. L., Huber, J., Shiv, B., & Tanner, R. J. (2008). Nonconscious goals and consumer choice. *Journal of Consumer Research*, 35, 189-201.
- Collins, A., & Loftus, E. (1975). A spreading-activation theory of semantic memory. *Psychological Review*, 82, 407-428.
- Crosby, F., Bromley, S., & Saxe, L. (1980). Recent unobtrusive studies of Black and White discrimination and prejudice: A literature review. *Psychological Bulletin*, 87, 546-56.
- Dien, J., Franklin, M. S., & May, C. J. (2006). Is “Blank” a suitable neutral prime for event-related potential experiments? *Brain and Language*, 97, 91-101.
- Dovidio, J. F., & Fazio, R. H. (1992). New technologies for the direct and indirect assessment of attitudes. In J. Tanur (Ed.), *Questions about questions: Inquiries into the cognitive bases*

- of surveys* (pp. 204-237). New York: Russell Sage Foundation.
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Lawrence Erlbaum.
- Eckes, T. and Trautner, H. M. (Eds.). (2000). *The developmental social psychology of gender*. Mahwah, NJ: Lawrence Erlbaum.
- Eveland, W. P. (2001). The cognitive mediation model of learning from the news - Evidence from nonelection, off-year election, and presidential election contexts. *Communication Research*, 28, 571-601.
- Eveland, W. P., Shah, D. V., Kwak, N. (2003). Assessing causality in the cognitive mediation model - A panel study of motivations, information processing, and learning during campaign 2000. *Communication Research*, 30, 359-386.
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bonafide pipeline? *Journal of Personality and Social Psychology*, 69, 1013-1027.
- Fazio, R. H., Sanbonmatsu, D. M., Powell, M. C., & Kardes, F. R. (1986). On the automatic activation of attitudes. *Journal of Personality and Social Psychology*, 50, 229-238.
- Fazio, R. H., Zanna, M. P., & Cooper, J. (1977). Dissonance and self-perception: An integrative view of each theory's proper domain of application. *Journal of Experimental Social Psychology*, 13, 464-479.
- Fenigstein, A., & Heyduk, R. G. (1985). Thought and action as determinants of media exposure. In D. Zillmann & J. Bryant (Eds.), *Selective exposure to communication* (pp. 113-139). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ferguson, M. J. (2007). On the automatic evaluation of end-states. *Journal of Personality and*

Social Psychology, 92, 596-611

Ferguson, M. J. (2008). On becoming ready to pursue a goal you don't know you have: Effects of nonconscious goals on evaluative readiness. *Journal of Personality and Social Psychology*, 95, 1268-1294.

Ferguson, M. J., & Bargh, J. A. (2004). Liking is for doing: The effects of goal pursuit on automatic evaluation. *Journal of Personality and Social Psychology*, 87, 557-572.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.

Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, 58, 203-210.

Fishbach, A., & Ferguson, M. J. (2007). The goal construct in social psychology. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social Psychology: Handbook of Basic Principles* (pp. 490-515). New York: Guilford Press.

Fishbach, A., Friedman, R., & Kruglanski, A. W. (2003). Leading us not unto temptation: Momentary allurements elicit overriding goal activation. *Journal of Personality and Social Psychology*, 84, 296-309.

Fishbach, A., & Shah, J. Y. (2006). Self-Control in Action: Implicit Dispositions Toward Goals and Away From Temptations. *Journal of Personality and Social Psychology*, 90, 820-832.

Fitzsimons, G. M. & Bargh, J. A. (2003). Thinking of you: Nonconscious pursuit of interpersonal goals associated with relationship partners. *Journal of Personality and Social Psychology*, 84, 148-164.

Frijda, N. H., & Zeelenberg, M. (2001). Appraisal: What is the dependent? In K. R. Scherer, A. Schorr & T. Johnstone (Eds.), *Appraisal processes in emotion* (pp. 141-157). Oxford,

- England: Oxford University Press.
- Gerbner, G., Gross, L., Morgan, M., Signorielli, N., and Shanahan, J. (2002). Growing up with television: Cultivation processes. In J. Bryant and D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 43-67). Mahwah, NJ: Lawrence Erlbaum.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74, 1464-1480.
- Hansen, C. H., & Hansen, R. D. (2000). Music and music videos. In D. Zillmann and P. Vorderer (Eds.), *Media entertainment: The psychology of its appeal* (pp. 175-196). Mahwah, NJ: Lawrence Erlbaum.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 133-168). New York: Guilford Press.
- Hintze, J. (2011). PASS 11 [Computer Software]. Kaysville, Utah: NCSS, LLC.
- Hoffner, C. (1997). Children's emotional reactions to a scary film: The role of prior outcome information and coping style. *Human Communication Research*, 23, 323-341.
- Jackson, D. N. (1994). *Jackson personality inventory-Revised manual*. Port Huron, MI: Research Psychologists Press.
- Jarvis, B. G. (2010). DirectRT (Version 2010) [Computer Software]. New York, NY: Empirisoft Corporation.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on gratifications research* (pp. 19-32). Beverly Hills, CA: Sage.

- Kawada, C. L. K., Oettingen, G., Gollwitzer, P. M., & Bargh, J. A. (2004). The projection of implicit and explicit goals. *Journal of Personality and Social Psychology*, 86, 545-559.
- Kawakami, K., Dion, K. L., & Dovidio, J. (1998). Racial prejudice and stereotype activation. *Personality and Social Psychology Bulletin*, 24, 407-416.
- Kay, A. C., Wheeler, S. C., Bargh, J. A., & Ross, L. (2004). Material priming: The influence of mundane objects on situational construal and competitive behavioral choice. *Organizational Behavior and Human Decision Processes*, 95, 83-96.
- Klinger, E. (1996). Emotional influences on cognitive processing, with implications for theories of both. In P.M. Gollwitzer & J.A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 168–189). New York: Guilford Press.
- Knobloch, S., Callison, C., Chen, L., Fritzsche, A., and Zillmann, D. (2005). Children's sex-stereotyped self-socialization through selective exposure to entertainment: Cross-cultural experiments in Germany, China, and the United States. *Journal of Communication*, 55, 122-138.
- Knobloch-Westerwick, S., Brück, J., & Hastall, M. R. (2006). The gender news use divide: Impacts of sex, gender, self-esteem, achievement, and affiliation motive on German newsreaders' exposure to news topics. *Communications*, 31, 329-345.
- Knobloch-Westerwick, S., Hastall, M. R., & Rossmann, M. (2009). Coping or escaping?: Effects of life dissatisfaction on selective exposure. *Communication Research*, 36, 207-228.
- Konijn, E. A., & Hoorn, J. F. (2005). Some like it bad: Testing a model for perceiving and experiencing fictional characters. *Media Psychology*, 7, 107-144.
- Krapp, A. (2005). Basic needs and the development of interest and intrinsic motivational orientations. *Learning and Instruction*, 15, 381–385.

- Krcmar, M., Greene, K., Banerjee, S., & Bagdasarov, Z. (2008). Exploring movie choice: An examination of uses and gratifications. Paper presented at the annual meeting of the International Communication Association.
- Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (pp. 331–378). New York: Academic Press.
- Lakin, J. L., & Chartrand, T. L. (2003). Using nonconscious behavioral mimicry to create affiliation and rapport. *Psychological Science*, *14*, 334-339.
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford, England: Oxford University Press.
- Levy, M. R., & Windahl, S. (1984). Audience activity and gratifications: A conceptual clarification and exploration. *Communication Research*, *11*, 51-78.
- Lewin, K., Dembo, T., Festinger, L., & Sears, P. S. (1944). Level of aspiration. In J. M. Hunt (Ed.), *Personality and the behavioral disorders* (pp. 333-371). New York, NY: Roland.
- Macrae, C. N., & Johnston, L. (1998). Help, I need somebody: Automatic action and inaction, *Social Cognition*, *16*, 400-417.
- McClelland, D. C., & Steel, R. S. (1972). *Motivation workshops: A student workbook for experiential learning in human motivation*. New York, NY: General Learning Press.
- McGuire, W. J. (1974). Psychological motives and communication gratification. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on gratifications research* (pp. 167-196). Beverly Hills, CA: Sage.
- McQuail, D. (1984). With the benefit of hindsight: Reflections on uses and gratifications research. *Critical Studies in Mass Communication*, *1*, 177-193.
- Meyer, D. E., & Schvaneveldt, R. W. (1971). Facilitation in recognizing pairs of words:

- Evidence of a dependence between retrieval operations. *Journal of Experimental Psychology*, 90, 227-234.
- Moskowitz, G. B. (2002). Preconscious effects of temporary goals on attention. *Journal of Experimental Social Psychology*, 38, 397-404.
- Nabi, R. L., Finnerty, K., Domschke, T., & Hull, S. (2006). Does misery love company? Exploring the therapeutic effects of TV viewing on regretted experiences. *Journal of Communication*, 56, 689-706.
- Neely, J. H. (1977). Semantic priming and retrieval from lexical memory - Roles of inhibitionless spreading activation and limited capacity, attention. *Journal of Experimental Psychology - General*, 106, 226-254.
- Nikula, R., Klinger, E., & Larson-Gutman, M. K. (1993). Current concerns and electrodermal reactivity: Responses to words and thoughts. *Journal of Personality*, 61, 63-84.
- Oliver, M. B. (1993). Exploring the paradox of the enjoyment of sad films. *Human Communication Research*, 19, 315-342.
- Oliver, M. B. (2000). The respondent gender gap. In D. Zillmann and P. Vorderer (Eds.), *Media entertainment: The psychology of its appeal* (pp. 215-234). Mahwah, NJ: Lawrence Erlbaum.
- Oliver, M. B. (2008). Tender affective states as predictors of entertainment preference. *Journal of Communication*, 58, 40-61.
- Oliver, M. B., & Raney, A. (2008). Development of hedonic and eudaimonic measures of entertainment motivations: The role of affective and cognitive gratifications. Paper presented at the 58th annual conference of the International Communication Association, Montreal, Canada.

- Oliver, M. B., Weaver, J. B., & Sargent, S. L. (2000). An examination of factors related to sex differences in enjoyment of sad films. *Journal of Broadcasting & Electronic Media*, 44, 282-300.
- Park, Y., & Raney, A. (2006). Exploring the priming effect of violent video games on subsequent media content selection. Paper presented at the annual meeting of the International Communication Association.
- Payne, B. K., Cheng, C. M., Govorun, O., & Stewart, B. D. (2005). An inkblot for attitudes: Affect misattribution as implicit measurement. *Journal of Personality and Social Psychology*, 89, 277-293.
- Perse, E. M. (1990). Involvement with local television news: Cognitive and emotional dimensions. *Human Communication Research*, 16, 556-581.
- Posner, M. I., & Snyder, C. R. R. (1975). Attention and cognitive control. In R. L. Solso (Ed.), *Information processing and cognition: The Loyola symposium* (pp. 55-85). Hillsdale, NJ: Erlbaum.
- Potts, R., Dedmon, A., & Halford, J. (1996). Sensation seeking, television viewing motives, and home television viewing patterns. *Personality and Individual Differences*, 21, 1081-1084.
- Ratcliff, R. (1993). Methods for dealing with reaction time outliers. *Psychological Bulletin*, 114, 510-532.
- Rayner, K. (1978). Foveal and parafoveal cues in reading. In J. Requin (Ed.), *Attention and performance VIII* (pp. 149-161). Hillsdale, NJ: Erlbaum.
- Reeves, B., & Nass, C. (1996). *The media equation: How people treat computers, television, and new media like real people and places*. New York, NY: Cambridge University Press.
- Riemann, B. C., & McNally, R. J. (1995). Cognitive processing of personally relevant

- information. *Cognition and Emotion*, 9, 325-340.
- Rubin, A. M. (1984). Ritualized and instrumental television viewing. *Journal of Communication*, 34, 67-77.
- Rubin, A. M. (1993). Audience activity and media use. *Communication Monographs*, 60, 98-105.
- Rubin, A. M. (2009). Uses-and-gratifications perspective on media effects. In J. Bryant & M. B. Oliver (Eds.), *Media Effects: Advances in theory and research* (3rd ed., pp. 165-184). New York, NY: Routledge.
- Scherer, K. R. (1984). On the nature and function of emotion: A component process. In K. R. Scherer and P. Ekman, (Eds.), *Approaches to emotion* (pp. 293–317). Hillsdale, NJ: Erlbaum.
- Scherer, K. R. (2001). Appraisal considered as a process of multilevel sequential checking. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion* (pp. 92–120). New York: Oxford University Press.
- Shapiro, M. A., Porticella, N. A., & Hancock, J. T. (2008). Identification, realism and ideal-self in interpreting media characters. Paper to be presented at the 58th annual conference of the International Communication Association, Montreal.
- Shah, J. Y., Friedman, R., & Kruglanski, A. W. (2002). Forgetting all else: On the antecedent and consequences of goal shielding. *Journal of Personality and Social Psychology*, 83, 1261-1280.
- Shaw, J. Y. & Kruglanski, A. W. (2003). When opportunity knocks: Bottom-up priming of goals by means and its effects on self-regulation. *Journal of Personality and Social Psychology*, 84, 1109-1122.

- Sherman, S. J., Presson, C. C., Chassin, L., Rose, J. S., & Koch, K. (2003). Implicit and explicit attitudes toward cigarette smoking: The effects of context and motivation. *Journal of Social and Clinical Psychology, 22*, 13–39.
- Shiffrin, R. M. & Schneider, W. (1977). Controlled and automatic human information processing: II. Perceptual learning, automatic attending, and a general theory. *Psychological Review, 84*, 127-190.
- Slater, M. D. (2007). Reinforcing spirals: The mutual influence of media selectivity and media effects and the impact on individual behavior and social identity. *Communication Theory, 17*, 281-303.
- Srull, T. K., & Wyer, R. S. (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology, 37*, 1660-1672.
- Steen, F. F., & Owens, S. A. (2001). Evolution's silent pedagogy: An adaptationist model of pretense and entertainment. *Journal of Cognition and Culture, 1*, 289-321.
- Tan, E. S. (2008). Entertainment as emotion: The functional architecture of the entertainment experience. *Media Psychology, 11*, 28-51.
- Tolman, E. C. (1955). Principles of performance. *Psychological Review, 62*, 315-326.
- Tooby, J. C., & Cosmides, L. (2001). Does beauty build adapted minds? Toward an evolutionary theory of aesthetics, fiction and the arts. *SubStance, 94–95*, 6-27.
- Vorderer, P., Steen, F. F., & Chan, E. (2006). Motivation. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 3-17). Mahwah, NJ: Laurence Erlbaum Associates.
- Vroom, V. H. (1964). *Work and motivation*. New York, NY: Wiley.
- Wittenbrink, B., Judd, C. M., & Park, B. (1997). Evidence for racial prejudice at the implicit

- level and its relationship with questionnaire measures. *Journal of Personality and Social Psychology*, 72, 262-274.
- Wittenbrink, B., Judd, C. M., & Park, B. (2001). Evaluative versus conceptual judgments in automatic stereotyping and prejudice. *Journal of Experimental Social Psychology*, 37, 244-252.
- Zillmann, D., & Bryant, J. (1985a). Selective-exposure phenomenon. *Selective exposure to communication* (pp. 1-10). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Zillmann, D., & Bryant, J. (1985b). Affect, mood, and emotion as determinants of selective exposure. *Selective exposure to communication* (pp. 157-190). Hillsdale, NJ: Lawrence Erlbaum Associates.